

# PROCESSOR®

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# Portable Storage Trends

## Keeping An Eye On What's New

by Elizabeth Millard

THERE ARE STILL A FEW garage sales where nostalgic IT types can find floppy disks and the type of hard case that used to be on every office desk. But thankfully, portable storage has come a long way since the days when data would get lost because someone spilled coffee on a floppy.

Here's a look at some of the new and upcoming trends, with devices that aren't likely to be dusty relics at an antique store anytime soon.

### Encrypted USB Drives

One of the most compelling developments in portable storage is the release of encrypted USB drives, which give a much-needed level of protection to the technology.

"The use of encryption for these drives is a big thing, because it delivers security in a way that we haven't had before," says Don Leatham, senior director of solutions and strategy at Lumension ([www.lumension.com](http://www.lumension.com)), a developer of application and device control software.



Some encryption has been available for thumb drives in the past, with the most affordable coming from the open-source arena, but now more manufacturers are baking encryption into the manufacturing process, Leatham notes.

These drives are particularly important for users, believes Brad Blake, IT director at Boston Medical Center ([www.bmc.org](http://www.bmc.org)). In the past, his organization has struggled with network security as doctors, patients, and medical school students would transfer files by using USB devices, exposing the network to security concerns.

Instead of shutting them out of the network, Blake found several manufacturers that offered encrypted drives and required that users choose one of those brands. It's been a challenge to move everyone toward a standardized system, he notes, but it's worth the effort.

"Being consistent in our policies about the USB drives has allowed us to address other kinds of portable storage like smartphones or basically anything that can be carried and plugged into the network," he says.

### Anti-Butterfingers Features

Another strong trend is durability. Recognizing that users are sometimes a clumsy bunch, some manufacturers have built portable drives with ruggedized outer cases to withstand sudden drops from a laptop bag or desk.

These might take the form of a hard outer shell or, in some cases, rubber edging that's shock-resistant.

Because portable drives have gotten so small—not just USB drives but also other types of mobile drives—creating an environment of durability is crucial, because they're easier to slip into bags and therefore easier to drop when other items are fished out while on the go.

### Fast Backup

The ability to back up numerous files with the touch of a single button is nothing new in the portable storage realm, but manufacturers are finding ways to increase the speed.

For SMEs that depend on some kind of user interaction, such as asking users to

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We cover the latest trends regarding portable storage devices and how to best secure them.

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### TECH & TRENDS

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IT is often tagged with being slothful in rolling out new technology, but a recent survey shows that a sizeable fraction of IT's customers feel the rate of change is actually too fast.

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As IT infrastructure has become mission-critical to business today, gone are the practices of "plug-and-pray." IT test labs can help avoid potential issues with new deployments.

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IT asset disposition is all about how you retire old equipment.

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In many businesses, employees are asking employers to use their personal notebooks for work. And some employers are accommodating their employees' requests.

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■ **3CX** announced the free 3CX VoIP phone, which allows users to make and receive calls from their computers. ■ **3PAR** announced the 3PAR InServ T400 and T800 Storage Servers, which feature the 3PAR Gen3 ASIC with integrated fat-to-thin processing. ■ **ATEN** released the SN3101, a new Serial over the 'Net three-in-one device server that supports RS-232, RS-422, and RS-485 data transfers and Ethernet connectivity. ■ **Endace** unveiled new features for NinjaProbe, an appliance that can help confine, collect, and replay network traffic at speeds of about 10Gbps. ■ **Innovative Research**

announced TileFlow 4.0, an airflow simulation software product that helps data center professionals analyze the cooling performance of their existing data centers. ■ **Kerio** introduced Kerio WinRoute Firewall 6.5, a corporate gateway firewall that includes new link load balancing and failover capabilities. ■ **Novell** announced Novell ZENworks Application Virtualization, a tool that eliminates application compatibility problems on Windows desktops. ■ **Shavlik** released Shavlik NetChk Protect 6.5, a virtual machine management tool designed for nonstop patch assessment and remediation of a virtual environment.

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The Processor.com home page is updated each week with new articles and hardware news to help you keep current. Visit [www.processor.com](http://www.processor.com) today.

A recent survey of IT professionals at 360 U.S. companies found that they reported only 47% of end users were satisfied with the rate of change in IT technology.

Gartner analyst Tom Austin's recent survey of IT professionals at 360 U.S. companies found that they reported only 47% of end users were satisfied with the rate of change in IT technology. Those feeling things moved too slowly totaled 32%; however, 21% said changes came too fast (see the "Users' Dissatisfaction With The Rate Of Change" graphic).

Far from preventing new services, many see IT shoving new technology at them faster than they want or can assimilate. This situation puts IT in quite a bind; as Austin sums it up, "For the typical IT organization, these results might suggest it should change little in terms of what it is doing. After all, if it were to accelerate the rate of change greatly, it would anger (or dissatisfy) more people. And if it were to slow it dramatically,

*Go to Page 12*

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- No Involvement

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- \$0 to \$9,999
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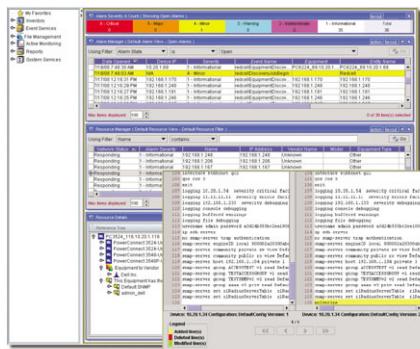
SEPTEMBER 12, 2008

## Manage Critical IT Issues From One Console

### Dorado Software's Redcell Network Commander Automates Manual Configuration Tasks

MANY OF THE important operations facing IT administrators today can all be addressed via Redcell Network Commander's consolidated user interface.

Redcell Network Commander's configuration management capabilities enable administrators to automatically configure and maintain their IT environments. They



Redcell Network Commander eliminates inefficiencies and errors caused by manual configuration.

can automate backup and restoration, easily perform device configuration comparisons, and update OS and firmware to hundreds of devices at once, eliminating the inefficiency and errors associated with manual configuration. With the easy-to-use graphical user interface, administrators can perform all device configuration tasks and track all changes.

Redcell Network Commander also has change and compliance management features, including both event and policy-based detection, proactive configuration

scanning, and comprehensive compliance reporting.

Redcell Network Commander is part of the Redcell for Enterprise Suite, which includes Redcell OpsCenter, a discovery, inventory, and monitoring platform.

#### Redcell Network Commander

Free trial available at [doradosoftware.com/trials.html](http://doradosoftware.com/trials.html)

Automated change and configuration management application built for sophisticated network environments

(916) 673-1100

[www.doradosoftware.com](http://www.doradosoftware.com)

**Dorado**  
SOFTWARE

MESSAGING & TELEPHONY

SEPTEMBER 5, 2008

## Add Skype, Keep Your Phone Infrastructure

### VoSKY Exchange Pro Doesn't Need Skype Software, Computers, Or Headsets

WITH SKYPE'S COST savings, it only makes sense to integrate Skype into your company's IP-PBX. The VoSKY Exchange Pro VISIP-EX is a gateway that features SIP trunk ports to let you assimilate Skype into your enterprise environment. Other than fiscal savings through using Skype, users



also get to take advantage of all of Skype's business features and services, such as interactive voice response, automatic call distribution, and call recording.

The Exchange Pro VISIP-EX gateway adds up to 30 lines of Skype, and because employees can make and receive phone calls over the existing corporate PBX, IT staff won't need to maintain Skype software or specialized headsets. Telecommuters and traveling workers can also use the free Skype client on a laptop or smartphone to avoid the complexities associated with remotely accessing IP PBXs.

The VoSKY Exchange Pro VISIP-EX also lets companies add Skype business applications to the IP PBX. For instance, you could set up a Skype-powered click-to-call button on the Web site to improve online sales and offer a more comprehensive sales presence. The gateway also

transmits all inbound and outbound Skype calls in the company's Call Detail Records archive. Based on VoSKY's Linux platform, the Exchange Pro VISIP-EX offers enterprise-grade performance and scalability.

#### VoSKY Exchange Pro VISIP-EX

\$7,500 for 18 ports or \$12,000 for 30 ports

With the VoSKY gateway, users can make and receive Skype calls from their regular office phones

(408) 731-3900

[www.vosky.com](http://www.vosky.com)

**VoSKY**

STORAGE

SEPTEMBER 5, 2008

## Centralized Control

### B&L's Vertices Tape Management Software Puts Control All In One Place

THE HANDLING OF your company's media is not something to be taken lightly. Vertices, a comprehensive tape management software solution from B&L Associates, collaborates with your backup system and gives you absolute control over your company's media, all with one simple application.

With Vertices, users can monitor the usage and movement of media at all their company's storage sites, onsite and off.

**Vertices**  
THE MEDIA MANAGEMENT SYSTEM

Having this kind of control translates to a rapid response to information requests such as audits. Users can also use Vertices to log mainframe media from their CA-1 or RMM systems. In addition, Vertices will automatically import tape information

from legacy tape management systems or backup applications and quickly verify tape movements via barcode scanning.

Vertices is compliant with government regulations such as HIPAA and Sarbanes-Oxley. It tracks, locates, and protects data with recovery capabilities, as well as creates an audit trail so that companies can easily provide reports when necessary. And accidental deletion of information is no worry with Vertices' purge and recovery system, and its two-tiered security system allows for role-based profiles so that people only see information relating to their security level.

Vertices distinguishes itself with its flexible composition that can adapt to different operating environments. Users can expand

Vertices' capabilities by choosing optional modules that better suit their company's setting. Vertices Automation Module integrates with several popular backup applications. Other modules are available, as well, such as the RFID Module and the Foreign Media Module.

#### B&L Associates Vertices

Starts at \$10,900 for Vertices Small Business Edition

Comprehensive tape management solution that gives users control over their company's media at all storage sites

(781) 444-1404

[www.bandl.com](http://www.bandl.com)

**B&L ASSOCIATES**

# Flexible, Reliable Servers

## Chieftec Smart & Bravo Work As Departmental Server, Workstation

**EVERY CHIEFTEC PRODUCT** is designed with quality construction, flexibility, attention to detail, and reliability in mind. These characteristics make our Smart and Bravo Series server solutions strong candidates for departmental servers and workstations.

Made from 1mm SECC steel, the Smart and Bravo Series employ clean and rounded-edge manufacturing techniques. Front and side panel locks are standard. Models support micro- to extended-ATX mother-



boards, and a metal PCI card retention bar simplifies adding or removing cards without screws. Two USB 2.0 ports, one 1394 Fire

Wire port, and line in/out audio connectors are on the front. Standard PSII or mini-redundant power supplies are supported.

### WH-01/WH-02 Smart Series

- Up to nine front accessible 5.25-inch drive bays include 3.5-inch drive carriers; eight on the WH-01
- Cooling is performed by optional 120mm rear or optional top fan mounts

### BA/BX/BH-01 Bravo Series

- SmartScrew and tool-free drive mounts
- The BA full tower has up to eight front drive bays and eight 3.5-inch internal bays; the BX and BH mid/mini-towers support up to six front-accessible bays and six internal drives
- Flexible cooling options

- Power the system with Chieftec's A135 Series power supply
- Cable management options assure cool, stable, reliable, and efficient system operation
- Backplanes in a variety of SATA, SAS, or SCSI RAID/JBOD configurations

### Bravo Series BA/BX/BH-01B-B-B Smart Series WH-01/02B-B-B

Server solutions that feature clean and rounded edges in a variety of options and configurations

(510) 324-3888

[www.chieftec.com](http://www.chieftec.com)



# Compliance Is Key

## Maintain Compliance Standards With Secure Elements' C5 Compliance Platform

**INDUSTRY STANDARDS** exist for a reason, but that doesn't make achieving compliance with every regulation any easier.

Secure Elements' C5 Compliance Platform is a tool designed to enable an enterprise to audit and evaluate its level of compliance all in one place and with one product. Further, the C5 Compliance Platform helps companies implement the necessary changes if and when compliance gaps are



present relating to internal, industry, or regulatory policies for IT control and security.

The latest update to the platform is the ability to audit and manage EPA Energy Star settings for Windows XP and Vista computers. Now, companies can more

easily comply with the mandate for computers and monitors to "sleep" when not in use.

Other features of the C5 Compliance Platform include configuration compliance scores, vulnerability scores, patch scores, and authorized software compliance scores. Benefits of the platform include smart automation, which results in fewer errors, repeatable processes, and predictable results; unified views for quick summary and detailed views of monitored assets; and overall improved compliance.

The C5 Compliance Platform is composed of four parts: C5 Element Manager, C5 Element Sensors, C5 Command Center, and C5 Compliance Content. Element Manager is an Intel-based 1U server for

centralized management of element sensors, which are lightweight software agents. Command Center offers unified views of a company's entire compliance posture, and the compliance content library is maintained by C5's Security Labs professionals.

### Secure Elements C5 Compliance Platform

Starts at \$25,000

Enables companies to audit, evaluate, and manage compliance issues

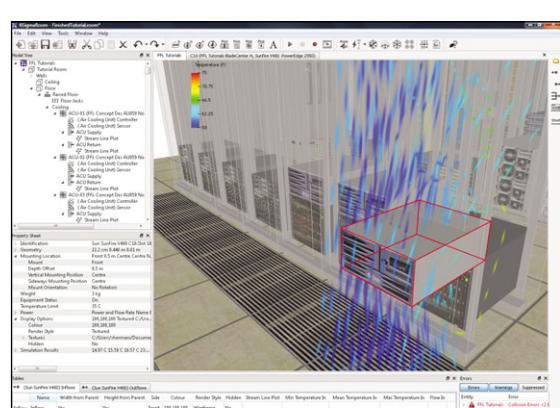
(703) 709-5011

[www.secure-elements.com](http://www.secure-elements.com)



# Data Center Design Goes Virtual

## Future Facilities' 6SigmaDC Data Center Design & Analysis Suite Offers Virtual Facility Planning



6SigmaDC's 3D modeling helps data center designers test out ideas.

A GOOD DATA CENTER starts with good design; it must be planned and laid out in such a way that heating, cabling, and more are done from a power, space, and cooling standpoint. Future Facilities' 6SigmaDC Design and Analysis software suite offers tools that let you create a 3D virtual facility to test out ideas.

Designers can create a VF (virtual facility) that essentially gives users a full inventory of the room, including cabinets, IT equipment, power systems, cooling systems, and ventilation grilles. Users can use the VF to help configure cabinets with rack-mounted equipment, to configure the facility or room, to act as a layout and

testing tool for room equipment, and to show ongoing configuration and facility management so changes can be tested before implementation.

Features include an easy-to-use GUI; the ability to read data from other design tools; large libraries of IT and supporting equipment such as ACUs, PDUs, and cabinets; and a complete view of the inventory. The suite also offers drag-and-drop capabilities to aid in model construction and

can predict grille flows, equipment resilience, ACU performance, cooling features, and energy efficiency metrics.

### Future Facilities 6SigmaDC Design & Analysis v4

Data center design tool that lets users create a virtual facility to test out configurations

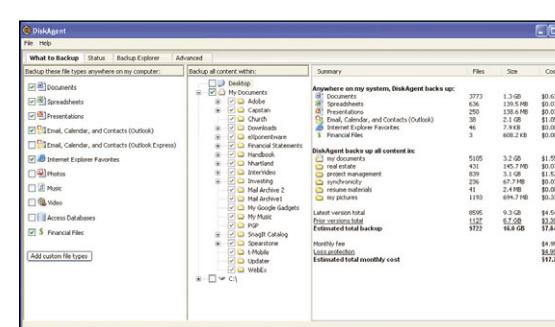
(408) 436-7701

[www.futurefacilities.com](http://www.futurefacilities.com)



# Remote Backup & Data Loss Prevention

## Spearstone's DiskAgent Offers Enterprise-Class Backup



DiskAgent by Spearstone lets you create secure online backups.

**DATA IS PERHAPS** the most valuable commodity a company possesses, and being able to recover it in the event of a disaster, secure it from a malicious hacker attack, or retrieve and protect it if a computer is lost or stolen is of utmost importance. DiskAgent SaaS (software as a service) from Spearstone seeks to offer a solution with remote backup and loss protection.

DiskAgent offers data storage and protection with an easy-to-use, scalable SaaS offering. Features include continuous online backup with centralized management and constant access to data, and if hardware is lost or stolen, users can remotely erase data, effectively preventing thieves from accessing sensitive files. DiskAgent lets IT admins track and potentially recover any stolen

devices with its hardware recovery functionality.

By encrypting all backed up data as it moves both to and from the Amazon S3 and EC2 environments, DiskAgent meets security regulations and lets admins enforce document retention policies and grant or restrict user access to remotely backed up files.

The DiskAgent SaaS is an easy-to-use package offering remote backup options and data loss protection. Yet DiskAgent is designed as an enterprise-level protection package that individuals other than IT professionals can implement and maintain and requires no expensive infrastructure.

### DiskAgent by Spearstone

Starts at \$4.95 per month per device; volume discounts available

SaaS (software as a service) that provides continuous online backup and remote device wipe capabilities

(877) DSK-AGNT

(877) 375-2468

[www.diskagent.com](http://www.diskagent.com)



# MarketPlace



# NEWS

Additionally, one-third of enterprises experience regular theft and data breaches through email, BlackBerrys, notebooks, flash memory, and other devices, according to the survey.

### IT Spending Drops

**AN AUGUST SURVEY** of people in charge of IT spending for their businesses shows that 30% say they have spent less on IT than planned during the third quarter. The survey, conducted by ChangeWave, also shows that 29% say their company's IT spending will either decrease or be stopped entirely during the fourth quarter; 13% say they will increase spending. In addition, 39% of those surveyed say they don't expect IT spending to increase until at least the second quarter of next year. Respondents cited high energy costs (35%) and the Presidential election (25%) as two big factors impacting their IT spending.

### Oracle To Buy ClearApp

**ORACLE ANNOUNCED ITS INTENT** to acquire ClearApp, which creates products designed to make it easier to manage composite applications built on service-oriented architecture platforms. With the acquisition, Oracle plans to combine ClearApp's products, along with other products Oracle recently acquired from Monifice and Auptyma, with its Oracle Enterprise Manager to provide a more comprehensive application management product for improving service levels and reducing downtime. Financial terms of the acquisition weren't made public; the deal is expected to close before the end of this year.

### Sony Recalls VAIO Notebooks

**A WIRING PROBLEM** has caused Sony to recall about 73,000 VAIO TZ notebooks that were sold in the U.S. and built both here and in Japan. The recall includes notebooks in the VAIO VGN-TZ100, VGN-TZ200, VGN-TZ300, and VG-TZ2000 series that were sold between July 2007 and August 2008. It appears that irregularly positioned wires near each notebook's hinge or a dislodged screw inside the hinge can cause overheating and short-circuiting, creating a "burn hazard" to users. Through this voluntary recall, Sony is offering to perform a free inspection and repair the unit if necessary.

### Dell Profit Down

**ACCORDING TO THE NEW YORK TIMES**, Dell's quarterly profit has declined by 17%. Dell had been slashing prices to bump up market share profits; however, Dell CEO Michael S. Dell claims that these cuts were "a bit too aggressive." Since Dell deferred part of its revenue until the third quarter, its gross margin dropped from 19.9% to 17.2%. Conversely, Dell's global shipments were on the upswing at 19% for the quarter, boasting a 1% worldwide market share increase.

### Former CA Chief Names Cohorts

**ACCORDING TO AN AFFIDAVIT** filed in U.S. District Court, the recently jailed former CA CEO, Sanjay Kumar, is naming names of other CA officials, past and present, who partook in the shady accounting practices that landed him behind bars. The practice in question, called "the 35-day month," let Sanjay and his cohorts include extra revenues for each fiscal quarter in an effort to meet analyst expectations. As a result of inquiries, CA paid \$225 million in restitution to shareholders after owning up to \$2.2 billion in falsely reported revenue over the course of several years. The company co-founder and former CEO, Charles Wang, is implicated in the affidavit, and Kumar also claims that board member Russell Artzt was aware of the practice. Kumar also reports that board members Alfonse D'Amato and Lewis Ranieri not only knew about the crimes, but tried to cover up the facts to protect Wang. All implicated have denied the allegations.

### Survey: Sensitive Data Not So Secure

**A RECENT CYBER-ARK "Trust, Security & Passwords" survey** of 300 IT security pros revealed that 88% would take sensitive data with them if laid off tomorrow, including CEO passwords, customer databases, and R&D plans. A third of that 88% also indicated they'd take privileged passwords granting them access to all the company's data. "Most company directors are blissfully unaware of the administrative or privileged passwords that their IT staff has access to [that] allows them to see everything that is going on within the company," says Cyber-Ark CEO Udi Mokady. One-third of IT staff surveyed admitted to snooping confidential data.

## WATCH THE STOCKS

This information provides a quick glimpse of current and historical stock prices and trends for 14 major companies in the technology market.

Company	Symbol	Year Ago	August 28 \$	Sept. 5 \$	% change from previous week
AMD	AMD	\$12.90	\$6.25	\$5.96	▼ 4.64%
Computer Associates	CA	\$25.42	\$24.27	\$22.10	▼ 8.94%
Cisco Systems	CSCO	\$32.22	\$24.66	\$22.26	▼ 9.73%
Dell	DELL	\$28.30	\$25.21	\$20.41	▼ 19.04%
Google	GOOG	\$527.80	\$473.78	\$444.25	▼ 6.23%
HP	HPQ	\$50.10	\$47.33	\$44.96	▼ 5.01%
IBM	IBM	\$117.88	\$124.58	\$114.33	▼ 8.23%
Intel	INTC	\$25.99	\$23.59	\$20.61	▼ 12.63%
McAfee	MFE	\$37.86	\$40.08	\$36.59	▼ 8.71%
Microsoft	MSFT	\$28.48	\$27.94	\$25.65	▼ 8.20%
Oracle	ORCL	\$20.73	\$22.64	\$20.07	▼ 11.35%
Red Hat Software	RHT	\$19.56	\$20.88	\$19.01	▼ 8.96%
Sun Microsystems	JAVA	\$5.37	\$9.10	\$8.50	▼ 6.59%
Symantec	SYMC	\$18.80	\$22.65	\$21.48	▼ 5.17%

*NOTE: This information is meant for reference only and should not be used as a basis for buy/sell decisions.*

### Google Releases Web Browser

**GOOGLE ANNOUNCED ITS OWN** Web browser, Google Chrome, early this month. The news was prematurely announced as a comic book post in an unofficial Google blog; the company made the official announcement Sept. 2. Google Chrome has been introduced for only Windows at this time, but Mac and Linux versions are in the works. Chrome features tabbed browsing, Web browsing privacy settings, and a default homepage which displays thumbnails of your most frequently visited sites. With its browser, Google hopes to steal away some of the market share Microsoft's Internet Explorer currently holds.

### Jump In Semiconductor Sales

**MARKET GROWTH** in consumer electronics, computers, and cell phones prompted a 7.6% rise in semiconductor sales from July 2007 to July 2008, according to the SIA (Semiconductor Industry Association). In addition, year-to-date semiconductor sales through July saw a 5% increase over last year. The SIA indicated that 300mm semiconductors accounted for the largest share of wafer manufacturing capacity and actual wafers processed. On the down side, SIA reported that sales of DRAM and NAND flash memory further declined due to price erosion. Total semiconductor sales increased by 11.6% over last year.

### Alcatel-Lucent Names CEO & Chairman

**TROUBLED TRANS-ATLANTIC CONGLOMERATE** Alcatel-Lucent has announced new picks for its CEO and chairman. Ben Verwaayen, formerly the chief executive officer at British Telecom, will take over as CEO from Patricia Russo, who previously held the top C-level slot at Lucent Technologies. Meanwhile, the Alcatel-Lucent board dubbed Philippe Camus the company's new chairman. Camus, co-managing partner of the Lagardère media group and a partner of New York investment/advisory firm Evercore Partners, takes the reins from former Alcatel chairman and CEO Serge Tchuruk.

### Mobile Phone Sales Up Nationwide

**RESEARCH FIRM GARTNER** has reported that worldwide sales of mobile phones are up 11.8% in the second quarter year over year. Regionally, the Asia-Pacific region has seen the most robust growth with a 20.5% jump in mobile phone sales. The Middle East and Africa also fared well with an increase of 18%. In the U.S. and Canada, sales were less spectacular at 6.5%; Gartner estimates that much of that was due to sales of replacement handsets and not necessarily new contracts. NPD Group disagrees with Gartner's assessment of U.S. sales, however, reporting that the numbers actually indicated a downturn of 13%. In Europe, Gartner noted that sales were down 8.2% but maintained that the industry should see about 11% growth throughout this year.

### Microsoft Tightens OS Validation With WGA Update

**MICROSOFT HAS STARTED** to deploy the latest WGA (Windows Genuine Advantage) Notifications for Windows XP. These deployments include normal updates that boost WGA's ability to discover the most recent stolen or counterfeit product keys, along with efforts to evade product activation. Additionally, this round of WGA Notifications features changes to the installation process to help make updates easier by using the Windows Update install prompt. There will also be improvements made to the effectiveness of notifications. If a Windows operating system fails validation, the desktop will turn to plain black at the next logon, and the user will see a persistent desktop notification.

## Upcoming IT Events

Are you looking to learn more about data center or IT topics? Network with some of your peers? Consider joining a group of data center professionals. If you don't see a meeting listed in your area, visit [www.afcom.com](http://www.afcom.com), [www.aitp.org](http://www.aitp.org), or [www.issa.org](http://www.issa.org) to find a chapter near you.

### - SEPTEMBER -

#### AITP Pittsburgh

September 15, 5:30 p.m.  
Slovak Catholic Sokol  
801 11th St.  
Ambridge, Penn.  
[www.aitp-pgh.org](http://www.aitp-pgh.org)

#### Interop

September 15-19  
New York, N.Y.  
[www.interop.com/newyork](http://www.interop.com/newyork)

#### VMworld 2008

September 15-18  
Las Vegas, Nev.  
[www.vmworld.com/vmworld/conferences.jspa](http://www.vmworld.com/vmworld/conferences.jspa)

#### ISSA Fort Worth

September 17, 11:30 a.m.  
The City of Fort Worth Building  
275 W. 13th Street  
Fort Worth, Texas  
[www.issa-cowtown.org](http://www.issa-cowtown.org)

#### AITP Omaha

September 18, 5:30 p.m.  
Seraph Corp.  
Omaha, Neb.  
[www.aitpomaha.org](http://www.aitpomaha.org)

#### ISSA Puget Sound

September 18, 5:30 p.m.  
Olympic Room, Microsoft Main Campus Building 27  
3009 157th Place NE  
Redmond, Wash.  
[www.issa-ps.org](http://www.issa-ps.org)

#### AITP Wichita (The Air Capital)

September 21  
Petroleum Club  
100 N. Broadway  
Wichita, Kan.  
[www.aitpwichita.org/index.htm](http://www.aitpwichita.org/index.htm)

#### Cleveland SecureWorld Expo

September 24-25  
Cleveland, Ohio  
[www.secureworldexpo.com](http://www.secureworldexpo.com)

#### ISSA Baltimore

September 24, 4:30 p.m.  
Sparta Inc.  
7110 Samuel Morse Drive  
Suite 200  
Columbia, Md.  
[www.issa-balt.org](http://www.issa-balt.org)

#### ITEC Los Angeles

September 24-25  
Los Angeles, Calif.  
[www.goitec.com](http://www.goitec.com)

#### AITP Akron

September 30, 6 p.m.  
Lindsay's Amber Restaurant  
1500 Canton Road  
Akron, Ohio  
[www.akron-aitp.org/index.htm](http://www.akron-aitp.org/index.htm)

### - OCTOBER -

#### ITEC St. Louis

October 1-2  
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## PRODUCTS AT WORK

# Deep Protection

## Third Brigade's Deep Security Protects Workstream From Intrusion

by Robyn Weisman

TALENT MANAGEMENT SOLUTIONS provider Workstream delivers hosted human resource services and telemanagement that encompasses recruitment and career development, performance planning, compensation planning, and outplacement services, among other things. The company has a customer list that suggests it is a leader in its chosen field—a list that includes such Fortune 500 companies as Dell, Verizon, Lilly, GlaxoSmithKline, Kaiser Permanente, and Wells Fargo.

Ottawa, Ontario,- and Maitland, Fla.,-based Workstream ([www.workstreaminc.com](http://www.workstreaminc.com)) serves its offerings via SaaS (software as a service) over the Web, hosting applications and data on behalf of its blue-chip clients. Of course, this means Workstream's clients are entrusting the company with their precious, confidential data.

"It was important from a security point of view that we house their data and protect their data in the applications from any types of intrusion, whether they are classic viruses or things that come in through SQL injections or cross-site scripting (XSS) and various different mechanisms that threats are done through a hosted service on the Web," says Mike Gioja, CIO and executive vice president of products and services for Workstream.

For his part, Gioja saw host intrusion and protection as the last lines of defense, and so he sought a technology that would protect data from such threats, particularly in the areas where rapid and ongoing changes would happen. "And new threats are coming out all the time that we [need to] quickly react to and be in the position to protect the HR data that we have," he says.

### A Win-Win For Workstream

Gioja looked at products from several major players for this line of defense but ultimately decided to use Ottawa, Ontario,-based Third Brigade's Deep Security ([www.thirdbrigade.com](http://www.thirdbrigade.com)), a hosted intrusion detection and prevention system.

According to Gioja, Workstream had acquired 15 companies and more than 20 applications, some of which were going to be kept in maintenance mode and others of which Workstream was going to extend. "I wanted something that I didn't have to rely

on an application change to make the environment secure because that would potentially cost more money than I would have wanted to invest into a specific product," Gioja says. "More importantly, by the time you fix, resolve, quality test, and then distribute or deploy that change, you are already subject to the vulnerability during that time period."

Gioja was looking for solutions and technology that would enable him to put something in front of his applications and give him the flexibility to tweak the system to secure these applications. Third Brigade's Deep Security offers Gioja this ability, as well as excellent filter management capabilities.

Workstream also wanted to find a vendor with which it could partner on a strategic level. "[Third Brigade] was a smaller company that was motivated to have partners like ourselves, where they would learn in our environment and quickly adapt, and we would influence the product to help us and to help them," says Gioja. Third Brigade is also located in the same city as Workstream, which made partnering that much more seamless.

Moreover, Third Brigade's customer service and consulting services allowed Workstream to work effectively with Third Brigade to fine-tune the best solution possible. "We had a lot of applications and different technologies, and we were building out a new data center, moving to virtualization and VMware. I wanted to make sure that as I was moving rapidly along, there was a company moving along with me, knowing what my road map was, where they could help being in front of that for me since we were utilizing a lot of leading-edge technologies," says Gioja, who calls the partnership a "win-win" for both parties.

### Learning Curve

Workstream's implementation of Deep Security went well. "As usual, there was a lot of learning up front, and it took a while for us to get the process down, to really determine the most effective way to manage this and the challenges of moving this kind of technology further into the research and development phase," says Gioja.



Workstream had to learn how to work with the filters and then how to structure them for applications so the company can effectively protect its network and make the security robust while still having a configurable application. "We had to make sure we went through quite a bit of testing to nail that down, but once we did that, and we had those filters by application in place, they were applicable to all of our clients pretty much, and then we were able to put them in templates and move them forward," Gioja says.

Although the upfront cost for Deep Security was higher than Workstream expected, Gioja says that once the program was really operational, the total cost of ownership actually ended up being much lower than the company expected. "As I add new clients, the effort is extremely minimal because [Deep Security is] already standardized and in a template form, and as I create new virtual machines, [the program] becomes part of [the system] automatically," Gioja says.

Most importantly, Deep Security works. Gioja says that multiple Workstream prospects and clients have conducted their own ethical hacking, using various third parties and tools to test the security of Workstream's SaaS model—and Workstream, with Third Brigade's help, has proven it can protect these enterprises' data from attacks.

### A True Partner

Third Brigade is also proving itself to be a worthy partner to Workstream through its commitment to optimizing its capabilities

for virtual networks. Gioja says Third Brigade is working directly with VMware to find better protection mechanisms within the world of virtualization. "As you move into a virtualized environment, things that used to go through your Cisco gear and network are no longer happening. It's all being done behind the scenes through virtualization," Gioja says.

Although Deep Security effectively solved Workstream's issues, Gioja, for his part, would like to see Third Brigade improve on Deep Security's reporting and auditing capabilities. Gioja says he is able to get most of the data he needs, but it requires a fair amount of massaging to get at it.

Specifically, Gioja is looking for audit reports to help ensure that Workstream's deployments are staying consistent, that nothing unique is happening in a particular instance and all its filters are at the latest level, that custom filters are standardized across all of the same applications, and so forth.

"That way, I can look at things that might not look quite right and make sure that any deployment is always matching what we're expecting as things go out in higher volume," he says. □

## Third Brigade Deep Security

A host-based, mission-critical intrusion defense system for enterprise networks that protects both physical and virtual devices on a granular level, monitors incoming and outgoing traffic for malicious traffic, and provides advanced reporting capabilities on such threats, as well as auditable reporting on security configurations

"We had a lot of applications and different technologies, and we were building out a new data center, moving to virtualization and VMware. I wanted to make sure that as I was moving rapidly along, there was a company moving along with me, knowing what my road map was, where they could help being in front of that for me since we were utilizing a lot of leading-edge technologies," says Mike Gioja, CIO and executive vice president of products and services for Workstream ([www.workstream.com](http://www.workstream.com)).

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## MESSAGING & TELEPHONY

AUGUST 22, 2008

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# Simplify Web Development

## Gizmox Visual WebGui For Silverlight Streamlines Enterprise Applications

**THE DEVELOPMENT CYCLE** of enterprise applications is critical for programmable Web plug-ins such as Microsoft Silverlight. A RAD (rapid application development) framework is one tool that can reduce overall development cycles. Gizmox has developed the Visual WebGui for this precise purpose, while still offering great flexibility.

Visual WebGui is a graphical user interface that enables Microsoft Silverlight for

rich data-centric Internet applications suited for enterprises. The framework introduces seamless integration to Visual Studio and offers the Web developer simplicity through its Windows Forms drag-and-drop interface design. Additionally, WebGui incorporates the ASP.NET deployment model and allows full Silverlight graphics capabilities.

Executing complex AJAX applications can require a sharp learning curve; how-

ever, Visual WebGui features server-side controls that function in the same manner as desktop application controls, effectively replacing AJAX browser controls in runtime. The WebGui complete control toolkit currently contains more than 50 customizable out-of-the-box implemented for decoupled presentation in either DHTML or Silverlight layers.

The user-friendly interface is easy to deploy for complex enterprise-level AJAX applications thanks to WinForms API and design-time support. Powerful object-oriented programming transports AJAX without consuming more than 1% of bandwidth. Visual WebGui application security is military-grade, as well, because it runs on the server, so the browser oper-

ates as a viewing pane to the server, and no sensitive data is transferred.

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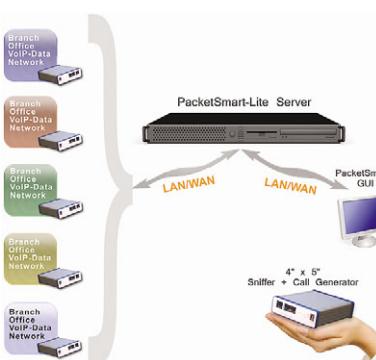


# Manage Media Networks

## Packet Island PacketSmart-Lite Platform Troubleshoots Voice & Data Networks

**PACKETSMART-LITE**, an entry-level version of Packet Island's PacketSmart platform, is ideal for small and medium-sized businesses. PacketSmart-Lite includes everything needed to quickly and reliably troubleshoot voice/data networks for up to 10 different sites of 50 to 200 phones each. Each platform comes with a Linux-based Dell server fully loaded with Packet Island's proprietary PacketSmart software component and five compact micro appliances that

provide sniffing and call generation capability from each site remotely. Each microappliance can handle up to 20 concurrent calls. SIP, MGCP, and Cisco proprietary signaling protocols are supported.



The PacketSmart platform provides convenient 24x7 remote monitoring for each site, allowing deep visibility into network issues that cause voice, video, and data degradation. A browser-independent, Java-based GUI allows quick retrieval of critical data, such as jitter, MOS, dropped packets, router path, traffic spikes/transient effects, and even full packet capture. Comprehensive reports are available to give you a reliable and automated snapshot of the state of your network.

IT administrators can use the solution to perform the following functions:

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### Packet Island's PacketSmart-Lite

Starts at \$8,000

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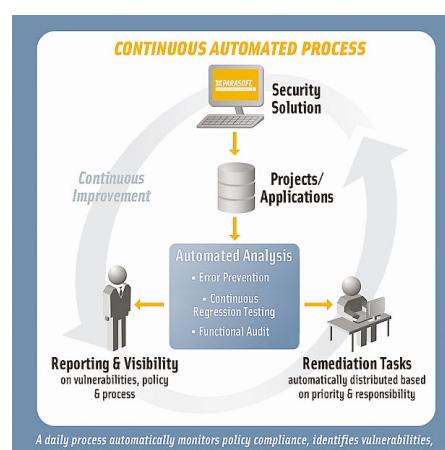
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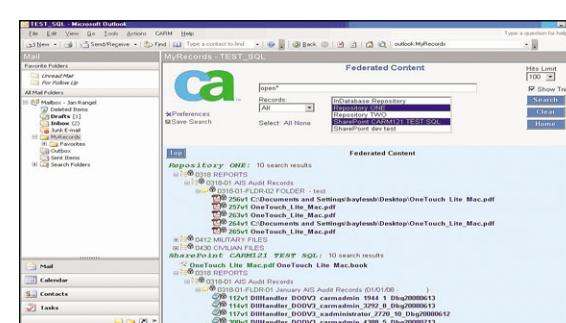
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CA Records Manager provides access to all content through a single interface

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CA Records Manager r12 is also certified by the United States DoD (Department of Defense) against the newly updated version 3 of the U.S. DoD 5015.2 standard, which provides for greater data security and integrity. Because of its long history of early and successful standards

adoption, CA was the first to certify against the new, more stringent standard.

"One of the most important new features in Records Manager r12 is the creation of an enhanced retention module that is an interface to perform all administrative tasks related to retention and disposition," says Reed Irvin, vice president of product management for CA. "Additionally, this release also delivers significant enhancements focused on creating transparency, declaring records more efficiently, improving the user experience, and applying policy on all content across the enterprise. For instance, new scripted email notification capabilities are designed to send an email notification to selected recipients when your specific defined criteria are not met within a specified time frame."

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SECURITY

AUGUST 8, 2008

# No-Hassle Password Management

**Cloakware's Server Password Manager v3.5 Offers Upgraded Deployment & Integration Features**

**PRIVILEGED AND A2A** (application-to-application) password management is a powerful way to maintain security for any company, yet many enterprises eschew this protection because of its prohibitive cost. Cloakware offers a more cost-effective solution to this

issue with the release of CSPM (Cloakware Server Password Manager) version 3.5.

CSPM is a Shared Account Password Management platform designed to support data centers of various types, including multisite, heterogeneous, and high-volume cen-

ters. CSPM is designed to offer ensured high availability in distributed networks and improved integration with homogeneous data centers, all without disrupting the system or causing downtime.

CSPM utilizes streamlined deployment options, improved integration into existing environments, scalability, and availability to help companies improve compliance, protect confidential data, decrease system downtime, and reduce operational costs.

CSPM allows regular password changes and password policies to be applied to server-based accounts. It eliminates hard-coded passwords by removing the need to share passwords with developers, so the problem of needing to create a new password doesn't require redeployment of applications.

Other features of CSPM include reliability across multiple sites and plug-and-play application server support. Deployment options enable one CSPM deployment to act as a primary core with support for multiple remote data centers.

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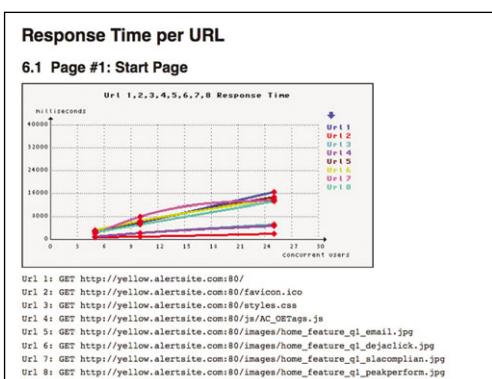
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# On-Demand Load Testing

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**WEB SITES ARE** launched every day, but it's likely many have little or no idea if the site will be able to handle the loads it will encounter. The result is many Web sites experiencing errors that could have been avoided with some robust load testing.

AlertSite addresses this need with the release of On-Demand Load Testing, a SaaS (software as a service) application that is designed to offer businesses quick, simple, and intuitive load testing that simulates actual user loads. On-Demand Load Testing is designed to help companies identify scalability issues, bolster the infrastructure, and prevent site crashes so customers never experience downtime.

By leveraging AlertSite's DéjàClick technology, which simplifies the testing, design, and setup processes, virtually

any user can build and deploy a load test easily and review the results quickly. Users can log on from anywhere in the world and quickly test. There is no need for learning a scripting language or acquiring special equipment software or extra personnel, which saves companies money.

On-Demand Load Testing works by simulating Web traffic from thousands of simultaneous users. Once the test is complete, the results are instantly generated into an on-demand report that shows a breakdown of Web site performance over time. Users can test URLs at any time, indicate the number of concurrent virtual site visitors, and even specify the time of day when automatic testing is performed. Users can reuse the scripts that are created from this process at any time and as often as needed.

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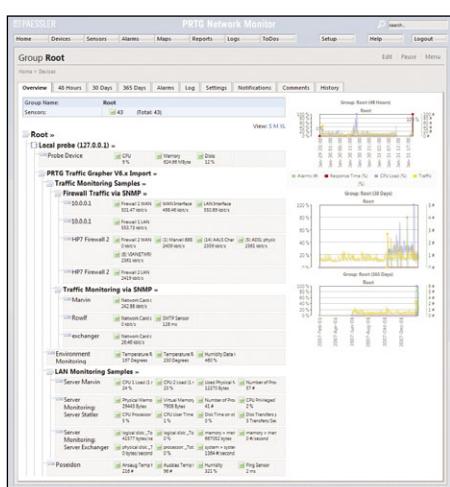
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**ADMINISTRATORS ARE** under constant and increasing pressure to troubleshoot and prevent network problems faster, and they need a streamlined solution with an interface that is simple to use.

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The software offers enhancements to automate network monitoring and reporting tasks, as well as the ability to leverage best practices for optimal configuration and analysis. Features include Auto-Pilot, a feature that constantly scans network segments for new devices and automatically determines device types and configures appropriate sensors for them, and preconfigured device templates that offer alarm and warning limits for standard devices. PRTG 7 also features extended support for more than 30 sensor types to monitor service, analyze network traffic, and track user behavior on the network.

The intended benefits include being able to identify out-of-the-ordinary traffic or usage patterns to quickly learn about the issues and act to resolve them.

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The Cougar 6000 series is designed to deliver growth flexibility and the ability to meet changing storage needs without disrupting business as usual with ONStor's Ever-Scale redundant modular architecture, heterogeneous storage virtualization, and advanced multicore storage network processors.

The "cluster-in-a-box" design of the Cougar 6000 series is designed to enable companies to meet service-level agreements with a device that leaves a small footprint and saves energy. Yet the open data center-class networked storage appliance can scale up to 4PB (petabytes) and 400K+ SpecSFS Ops cluster.

The Cougar 6000 series can help reduce costs by allowing customers to leverage the storage they presently have, which



bulks up their storage capacity without jettisoning their previous data center investment.

The Cougar 6000 series includes centrally managed and provisioned open storage, a compact and energy-efficient solid-state design, and 64-bit multicore pipelined network processor architecture. For high availability, the NAS gateways offer an 8-node cluster, 32 virtual servers per cluster, eight GigE ports, eight FC ports per filer, and other advanced features such as n-way clustering and pooled storage management.

### ONStor Cougar 6000 NAS Gateways

Starts at \$122,500 (includes NAS management software)

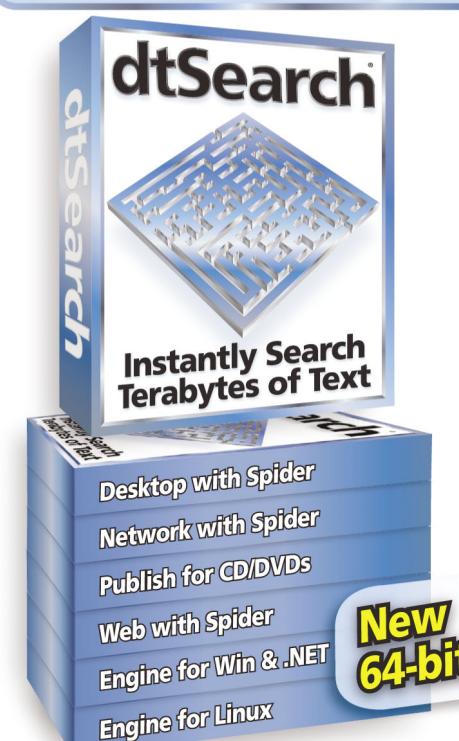
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# Who Gets What?

## Developing An Outfitting Strategy For Portable Storage Is Key

by Christian Perry

**FOR TODAY'S ENTERPRISE EMPLOYEES**, it's tough to beat the convenience of portable storage devices. Affordable and user-friendly, these devices can help employees take work with them wherever they go, regardless of file size and type. But as these products increasingly populate the workplace—whether distributed by the organization or not—it's essential for IT managers to develop a strategy for effectively matching the right device to the right employee.

"Remote users will always find a need for portable storage devices because of simplicity and lower price points," says Skip Taylor, vice president of product marketing for Fiberlink Communications ([www.fiberlink.com](http://www.fiberlink.com)). "The popularity of personal applications and devices [such as] iTunes and iPods will only fill up the existing hard disk solutions in place today. On the positive side, more employees are working from a home office, where backup systems may not always be in place, so, in this example, an external storage device would make sense to support and/or offer."

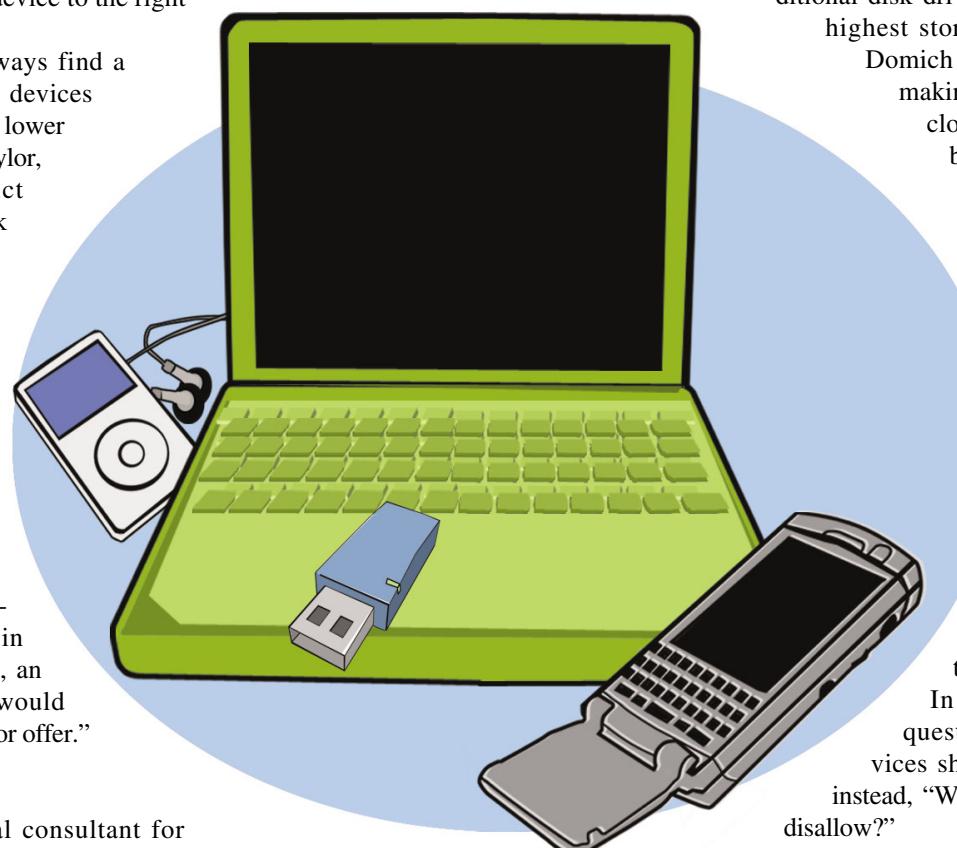
### Consider The Purpose

Kris Domich, principal consultant for data center and storage solutions at Dimension Data ([www.dimensiondata.com](http://www.dimensiondata.com)), says that it is crucial to consider the job-related purpose of portage storage devices. For example, employees that work primarily in the office and only occasionally at home could have a legitimate need for a portable device to transfer files between work and home.

"Consequently, an IT manager may issue a device that allows the employee to move

files securely between home and office computers. Another user might be a mobile worker or telecommuter who is seldom in the office; this user will have different requirements and might need a portable device for system backups because he or she may not have high-speed access to the corporate network for this function," Domich says.

Taylor agrees, saying that decisions should be centered on specific needs, such



as working from home and requiring an external storage device for backup. With that said, he adds that users will purchase portable USB drives on their own, and organizations need to be aware of which devices are being used so they can effectively establish enforceable policies around their use.

Determining which devices are the right choice for different employees can be

**The question isn't, "Which devices should we acquire?" but instead, "Which devices should we disallow?"**

- Skip Taylor, vice president of product marketing for Fiberlink Communications

somewhat difficult with the wealth of storage devices now available on the market, but Domich boils down the process to two initial factors: reliability and security. On the reliability side, he notes that solid-state technology such as flash memory offer the most ruggedized form of portable storage devices, but they come with pros and cons. On the downside, SSDs are limited in capacity and small, meaning they're easy to lose; on the other hand, they're highly convenient and can withstand hazards typically encountered on the road.

For employees with heavy storage demands, portage storage devices using traditional disk drive technology offer the highest storage capacities, which Domich says can be useful for making complete hard drive clones, which in turn can be used to restore an entire machine on the road.

### Portable Problems

The most pressing concern for IT managers looking to outfit employees with portable storage devices should be security. Data theft continues to ravage enterprises, and portable devices can make that theft frighteningly simple.

In fact, Taylor says the question isn't, "Which devices should we acquire?" but instead, "Which devices should we disallow?"

"Ultimately, with today's concerns over data privacy and data leakage, do organizations really know what's being moved to portable storage devices? Would some of that data movement have a negative effect on organizational efforts to stay inside the rules of governmental compliance? This may become a primary concern," Taylor says.

By nature, portable storage devices represent a serious security threat. Blindly handing them out to employees can be a dangerous practice, especially because the devices enable corporate information to become portable. When deciding which devices should go to which employees, then, IT managers should take into consideration the types of data the employees will be handling. For instance, an accountant working closely with personal information such as Social Security numbers

and birth dates would need a device with stronger encryption than would an intern with limited access to valuable information. Along the same lines, Domich recommends you "balance this level of security with the aptitude of your users." If the security measures are too complex for an employee to grasp, there's a good chance he won't use them.

### Stay In Control

Regardless of the decisions made in the selection of portable storage devices, Taylor and Domich warn that some employees are going to acquire their own devices, regardless of what the company offers and with or without the proper security measures and policies established by IT managers.

"The key is to understand how the devices are used [and] what type of data is being stored, and [placing] some restriction around the number of acceptable USB devices to help mitigate risks of unwanted devices or malicious intent to bypass existing device security," Taylor says. □

## One For All?

There are generally two strategies for pairing portable storage devices with employees: One is buying the same device for all employees, while the other is fitting specific devices to specific employees. According to Kris Domich, principal consultant for data center and storage solutions at Dimension Data ([www.dimensiondata.com](http://www.dimensiondata.com)), it's best to limit the variety of devices.

"Since usable space is going to be a key differentiator among device requirements, it is possible that both flash- and disk-based devices may be needed by the same company," Domich says. "As with any technology, it is important to maintain [as] small [a] number of possible configurations or variations of a device as possible. This helps keep management and support simplified and can speed up replacements when required. Usually, one flash- and one disk-based device are sufficient to meet the needs of most users."

Skip Taylor, vice president of product marketing for Fiberlink Communications ([www.fiberlink.com](http://www.fiberlink.com)), adds, "If the company is going to provide support for the devices, the fewer number of different devices, the better. . . . It's really not a cost issue unless the requirement is for far greater amounts of storage. The customer should look to a similar solution and offer two or three different amounts of storage as one suggestion."

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# Securing Portable Storage

## Small Devices Can Mean Big Security Risks For SMEs

by James Cope

• • •

**YOUR EMPLOYEES MAY BE TOTING** sensitive information out of the office on portable storage devices without much consideration of the risk involved. Media devices, such as iPods and USB drives, account for 19% of confidential information leaks among enterprises surveyed in an IDC study, while lost or stolen devices that include PDAs and smartphones make up another 33%. Add these together, and you have a potential data loss that exceeds the 51% resulting from lost or stolen laptops, according to the IDC stats.

And those figures may be on the low side, says Brian Burke, IDC program director of security products and services, who presented the data in an August 2008 Webcast sponsored by Cupertino, Calif.-based Symantec ([www.symantec.com](http://www.symantec.com)).

As recently as three years ago, some companies were blocking USB ports by gluing them shut, says Symantec's Senior Director of Data Loss Prevention Products and Marketing Steve Roop. "Of course, employees didn't like that; they have mobile jobs and often share information."

Aside from glue, what's an SME to do?

### Encryption Is Key

Whether enforced by policy, technology, or a combination of both, encrypting data on portable storage devices is the best solution, says Nagraj Seshadri, product marketing manager at Utimaco Safeware ([www.utimaco.com](http://www.utimaco.com)) in Foxboro, Mass. Companies can use encryption software to encrypt data on almost any kind of media, including external hard drives, CD-Rs, DVDs, iPods, and USB media, Seshadri says. But sometimes sharing it securely via portable media is another matter.

In the case of USB drives, now available in multigigabyte capacities and perhaps the most popular and easiest to use of all portable storage devices, there is a particular challenge: Users often put data on a

USB drive to share with someone else, such as a customer, a vendor, or a project team. The problem is, Seshadri says, sharing encrypted data means you have to share the password that accesses it.

There's a way around the problem, though: Use encryption software that creates key rings, enabling a group—or an

Jefferies says. "People are cognizant of the risks. If they could circumvent security software, they would."

Citing Boeing's widely reported security breach in 2007, in which an employee made off with 320,000 company document files using a USB thumb drive, Jefferies believes that anything that goes out of a USB port should be encrypted. He also advocates port control. "They [employees who steal data] understand the implications of their actions," he says.

Most information security experts agree that the main reason enterprise computer users avoid security actions, including portable storage encryption, is that they believe it is difficult. That perceived barrier, and the real risk of losing valuable and sensitive data, is why Jefferies believes securing files on a portable device should be drag-and-drop easy.

### Managing What's Stored & Where

Policy and training can influence what people put on portable storage devices and encourage them to encrypt what they store, but it still doesn't assure IT managers that some

employee won't import a truckload of customer data into an Excel spreadsheet and take it home on an iPod.

Chris Parkerson, group product marketing manager for data protection at McAfee ([www.mcafee.com](http://www.mcafee.com)), says there are more problems than the device itself at work here: "There is company information that you don't want to leave the company, you have sensitive data you need to allow [access to], and you need to ensure the device itself is secure."

Parkerson's statement suggests interrelationships that require direct technical control over content and how people use portable storage in addition to encryption.

Using software that Parkerson says "watches how users use information" and enables IT managers to set parameters as to what information can go where is one way to address the content and storage device question. For example, a setting specifying that "credit card information should never go on external media" would warn users if

they attempt to copy it there and stop them from doing it. "[The software application] looks at the device and the information."

Symantec's Roop echoes the need to have IT controls on what people can copy to portable storage devices and what they can't. He says, "If someone wants to move music or a shopping list, that's OK; if you want to move 40,000 Social Security numbers and dates of birth, that's not OK." For more information on end-user guidelines, turn to "Establishing End-User Guidelines" on page 11.

Roop says, "The advantage of the new [content and device management] approach is that employees can use portable storage for the reasons they were intended. Employees can collaborate, and the company's most sensitive data is protected at the same time." □

## Consequences Of Data Leaks

According to a 2008 whitepaper from SanDisk ([www.sandisk.com](http://www.sandisk.com)), "when it comes to portable media players, flash drives, memory cards, optical discs, external hard drives, and other portable storage devices, most IT managers don't even know where to begin. It's the endpoints of the network where enterprises are most vulnerable to data leakage, and these days, those endpoints are everywhere." Here are just a few of the consequences SanDisk warns of as the result of data leaks.

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# Establishing End-User Guidelines

# What Your Enterprise Should Know About Using Portable Devices

*by Chris A. MacKinnon*

**POR**TABILITY IN THE ENTERPRISE is a necessity these days. Business is happening faster than it used to, so devices such as smartphones, portable hard drives, and USB devices are already commonplace and ultimately convenient. But if your enterprise partakes in passing these PSDs (portable storage devices) out to its employees, what types of policies, procedures, or operating guidelines should the enterprise have in place to guide employees in terms of handling and use?

## Challenges & Guidelines

Feliciano Rivera, executive vice president and general manager of Secuware ([www.secuware.com](http://www.secuware.com)), says setting guidelines is a necessity but not always an easy task. "In today's enterprise," he says, "PSDs are often owned by the employee. The increased flexibility provided by these devices permits data flows of information within the organization and is obviously beneficial, and as a result, most organizations are not willing to inhibit [or] set policies and guidelines to regulate their use. The clear lack of a dividing line between personal devices and corporate devices represents a growing challenge to the IT security team. Numerous incidents involving USB or FireWire devices have demonstrated that a great deal of sensitive data is leaking out through PSDs."

In the enterprise, necessity trumps challenge. Andre Muscat, director of engineering at GFI ([www.gfi.com](http://www.gfi.com)), says in the situation where the company allows employees to use their personal portable storage devices, administrators need to impose strict controls. He comments, "While it is impossible to create an inventory of every device owned by an employee, administrators can, however, through software on the server, impose restrictions that allow controlled access to the network." Muscat says the principle of least privilege applies here, where only those employees with genuine business needs should be given permission to connect to a corporate network.

Use of these devices, Muscat says, should therefore be on an as-needed basis and not on an individual or group basis. For example, a clerk will not need USB access

if he never uses a USB stick to carry out his duties, even though others in that same department may do so. "Where possible, the enterprise should state which devices are acceptable and can be used on the network," says Muscat. This type of policy, he says, may allow the use of USB sticks but not iPods or smartphones.

Muscat says policies used to control portable storage devices must include clear instructions to employees that the use of personal PSDs is restricted to work-related needs and that all activity can and will be monitored if necessary. He adds, "End users need to be told that they are ultimately accountable if that device is lost or the data is compromised through the employee's negligence. Additionally, every employee allowed to use portable devices should know at all times the whereabouts of the device."

Although some enterprises may recommend banning PSDs, Rivera strongly

nonobtrusive and transparent to the end user,” Rivera says.

## What To Avoid

So what types of PSDs should enterprises avoid? Rivera says Secuware clients have found that any PSD can be used by implementing device and user policies. He says, however, that enterprises should beware of rogue or unauthorized devices being used without some type of policy for the user or device. He elaborates, “A policy needs to be in place for devices of any storage size. More important is the policy for the users in the organization. Not all organizations or users have access to confidential information; therefore, a policy by users or groups needs to be easily implemented, managed, and transparent to the end user for the PSD.”

Muscat says when it comes to PSDs that enterprises should avoid, enterprises have two options: They can either ban all devices, which doesn't always make sense, or they can distribute company-approved devices to select employees. He adds, "These could be low-volume memory sticks with built-in encryption that allow



recommends that guidelines are placed to allow only authorized devices for an organization and its users. He says profiles should be established easily, enabling an IT organization to establish policies for individual users, groups, and/or domains. "Overall guidelines need to be communicated; however, they should be

data to be transferred but not capable of storing large amounts of data. This would limit devices to those the company feels comfortable with and eliminate high-risk devices such as iPods, smartphones, and other devices using wireless technologies.”

There are also practices to be avoided. Muscat says even in enterprises where the

# PSD Due Diligence

Letting employees use PSDs (portable storage devices) is risky, regardless of whether the devices are company-supplied. Andre Muscat, director of engineering at GFI ([www.gfi.com](http://www.gfi.com)), highlights some best practices enterprises should adhere to regarding PSDs: "If employees are given corporate-approved portable storage devices or permission to use their own devices, the enterprise must have sound security policies in place that clearly explain how these devices can be used, why restrictions have been imposed, when portable storage devices can be used by employees, and why they need to treat the devices and the information stored in them with diligence. If the company provides its own devices and bans all other types, system administrators need to have an inventory of each device, the person using it, and a record of all data transfer activity carried out with that device."

use of PSDs is allowed, certain practices should be discouraged, if not banned outright. He says these include bringing in third-party software to the office, installing or copying data to the network that is not work-related, allowing users to download material such as MP3s to their portable devices during office hours (Web filtering quickly puts the brakes on this activity), and using devices that may have been compromised outside the office.

In Rivera's opinion, enterprises should avoid being in denial about the loss of data through PSDs. He says it's also important to avoid blocking all devices, due to the necessity of data flows within the organization. Rivera adds, "Not having central control of what devices are allowed by individuals or user groups should also be avoided. And under no circumstance should an enterprise be without a corporate user set of guidelines."

Eyal Benjamin, chief operating officer for PREFIX IT ([www.prefixit.com](http://www.prefixit.com)), says enterprises should avoid or even block portable storage devices that have connectivity access. In Benjamin's opinion, this is a major security breach, because once a PSD is connected to a PC, its other leg (such as wireless access) might be open for intruders, Trojans, and data leakage.

intruders, Trojans, and data leakage.

Benjamin says USB protection is also a part of full endpoint management and maintenance tasks. “There are many tools for USB management,” he says, “yet using them [alongside] other tools (remote takeover, asset management) places a huge

Muscat adds a final note, saying, "Do not trust employees to follow security policies to the letter. That is why the use of appropriate technology which allows comprehensive control over all devices attached to the network is recommended."

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# Portable Storage Trends

*Continued from Page 1*

regularly back up their laptop files while they're traveling or off the network for a few days, a speedy backup can be useful.

Some current transfer rates range from 110 to 480MBps, and IT managers can expect to see even speedier transfers in the future, because manufacturers are attempting to outdo each other.

## Stronger Management Practices

Portable storage is following the same type of track seen with personal computing when it first came on the scene, notes Leatham. Employees that leaned toward

early adoption of new technology would bring PCs, and later, laptops, into the office and soon everyone could see the benefits of the increased computing power.

"Companies are realizing that they need to start managing and taking control of portable storage in the same way they had to control PCs," Leatham says. "The early trend was to disallow them, but now they're finding better ways to inventory them and secure them."

Not long ago, some IT departments would fill USB ports with hot glue or cut out parts of a motherboard so drives couldn't be used. But with better management strategies, there's no need to block users anymore.

**"Companies are realizing that they need to start managing and taking control of portable storage in the same way they had to control PCs."**

- Lumension's Don Leatham

## Enterprise & IT Personality

In addition to understanding end users' propensities for new technology, Gartner analyst Jackie Fenn says it's important for an organization to assess its overall comfort level with change and technology adoption. This can be done informally, by observing cultural norms within the organization, or through what Gartner terms an EPP (Enterprise Personality Profile), sort of a Myers-Briggs test for corporations. Fenn says IT gets in trouble if it's out of sync, either on the conservative or aggressive side, with the rest of the company.

Rene White, managing director at the Chasm Group ([www.chasmgroup.com](http://www.chasmgroup.com)), says he finds IT departments, particularly in large enterprises, falling into two primary categories: controllers and innovators. The first group is "optimized to provide a good-enough platform with maximal control by IT" because the company's business needs don't require the latest technology. The second group is found in companies who have made IT a strategic and critical part of their business, using it as a competitive differentiator.

Media hype is often the driving force behind users, business managers, or IT itself pushing new technologies; however, the hype goes through an evolution Gartner's Fenn has characterized as the Hype Cycle. The initial exuberance surrounding a new

Newer controls include being able to identify a portable storage user through an inventory system so that a user could be held accountable for what's being downloaded or any security risks, Leatham notes.

## Thinking Ahead

Although predicting new technology is always akin to trying plug a crystal ball into a USB port, experts note that the maturation of USB drives should lead to more advanced features, such as stronger encryption and more intuitive management controls.

One function that might crop up more often in the future is application storage on portables, Leatham says. Currently, there are some compatibility issues caused by so-called "applications on a stick."

Security concerns also make this strategy less effective than it could be, but he anticipates that in the near future, storage devices will have enough capacity, security, and interoperability to handle several standalone applications contained within a single device.

Portable storage will likely continue to become more secure, with faster transfer rates, more capacity and performance, and some tough outer cases to boot. P

## Top Trend To Watch: Getting Colorful, Creative & Durable

USB drives have gotten snazzy in the past few years. Users can choose from a range of designs for transferring their files, with some drives shaped like sushi pieces, Legos, or tiny rubber duckies, among other amusing choices. Manufacturers are spicing up even formerly sedate drives with color splashes and designs—one company even jazzes up its drive to glow when activity is occurring.

Granted, enterprises aren't always known for buying fun or eye-catching devices, but as long as the devices provide ample security and offer features that meet the business' and employees' needs, these out-of-the-ordinary devices are at least worth considering. The data center has enough black and gray equipment in it, so why not throw in a well-encrypted device with a bright red exterior or a secure, hardy drive that just so happens to look like a California roll?

# Is Your IT Organization Slow?

*Continued from Page 1*

there would be more people dissatisfied with the slow rate of change."

Yet he believes there's a way, based on Everett M. Rogers' Diffusion of Innovations theory, that IT can optimize the introduction of new applications and services to meet the needs of all constituencies within a company.

## User Technology Adoption Categories

Rogers' theory outlines how innovations and technology tend to diffuse slowly through a society or company at large but at widely varying rates for distinct user groups within the overall population. He found that the overall adoption rate forms an S-shaped curve, with few users of a new technology in its early stages, followed by a period of rapid assimilation by the majority of users, with the laggards slowly acquiescing after the technology has reached maturity.

Austin's key insight is that IT can maximize user satisfaction with the rate of technology change by understanding the user segments within their organization and focusing new product rollouts on the innovators and early adopters within the company. "Most organizations will be better off finding users who are already pining for the new technologies they (the users) think will improve their ability to do their jobs," he says, with the caveat that individuals may move between being an "innovator" in one area and "laggard" in another.

## Improving User Satisfaction With Technology Change

By introducing technologies using a more refined user segmentation model or using a progressive, selective implementation, IT departments can improve overall user satisfaction with new technology. This requires understanding where users fall on the technology-adoption curve through surveys, social network analysis, and user satisfaction metrics.

- Set a goal for the minimum acceptable level of user satisfaction with deployed technology (based on the impact on productivity, reputation, retention, hiring costs, and overall competitiveness).

- Put in place a set of intermediate satisfaction objectives to achieve on the march toward the user satisfaction goal.
- At least twice a year, test user satisfaction with the rate of technology change and evaluate the results using a formal metric such as Gartner's pace-related user dissatisfaction model.
- Cultivate and nurture informal communities of innovators and early adopters—and let some of them fail.
- Cultivate and nurture informal communities of technology laggards, as well.

SOURCE: "USERS DISSATISFIED WITH RATE OF IT CHANGE: NORMS, MODELS, TESTS AND ACTION"; BY TOM AUSTIN; GARTNER RESEARCH REPORT # G00157291; 23 MAY 2008.

product, what Fenn terms the Peak of Inflated Expectations, often reflects the vision of its potential rather than the reality of its existing implementation.

IT organizations need to be cognizant of Hype Cycles as they plan new technology rollouts, but Fenn advises taking neither an overly enthusiastic nor a cynical viewpoint. She says, "Do not invest in a technology just because it is being hyped nor ignore a technology just because it is not living up to early overexpectations." She adds that companies should be "selectively aggressive" in their adoption of new technologies, focusing on those that have the greatest potential for enhancing their business.

## Avoiding Operational & Security Problems

A major concern with any new technology is its potential ramifications on IT operations and security. Hannon Brett, president of SaaS provider MeetingSense Software ([www.meetingsense.com](http://www.meetingsense.com)), says that data security is one of the biggest issues it must address with potential customers. Brett adds, "IT departments want to understand how the system works, what are the data flows, [and] how and where data is housed."

Roger Kay of Endpoint Technologies ([www.ndpta.com](http://www.ndpta.com)) finds that many IT departments don't fully understand new Web 2.0 and SaaS offerings and are inherently distrustful of anyone outside the company having access to and control over their data. This underscores the need for IT to perform due diligence on the security, reliability, and robustness of any new technology.

Besides a few exceptions, Kay doesn't see a trend of end users pushing too much technology on IT departments. He says new projects are usually the result of genuine business needs. "The pace of technology adoption is no faster than the business side wants," he says.

Marco Hegyi of the Chasm Group concurs: "IT departments understand they have to partner with business units." He adds that new IT services should be driven by business metrics, not technology.

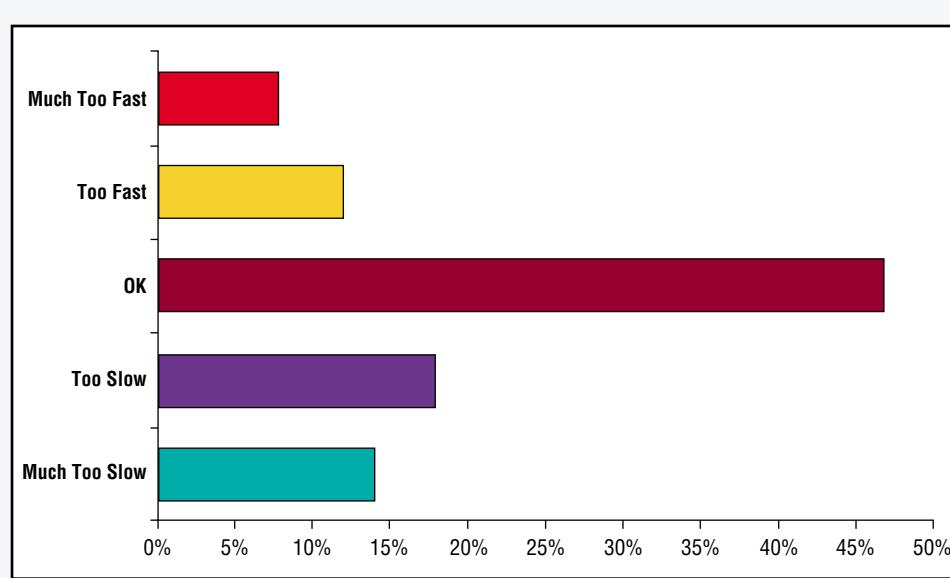
While it's easy for IT to hop on the technology treadmill, the Chasm Group's White cautions that introducing too much too fast can drive unnecessary complexity. Striking the proper balance between staying technologically competitive, meeting business and end-user needs, and running a stable IT operation is difficult, but White offers one bit of advice: "Sometimes good enough is good enough." P

## Users' Dissatisfaction With The Rate Of Change

In March 2008, Gartner conducted a survey of IT professionals in 360 U.S.-based enterprises seeking to understand more clearly what workplace technologies they were investing in and why. The survey asked, "How would you allocate the end users in your enterprise into the following categories?" The categories were:

- ✓ Very dissatisfied: They often feel the rate of internal technology change is too slow.
- ✓ Somewhat dissatisfied: They sometimes feel the rate of internal technology change is too slow.
- ✓ Content with the rate of internal technology change.
- ✓ Somewhat dissatisfied: They sometimes feel the rate of internal technology change is too fast.
- ✓ Very dissatisfied: They often feel the rate of internal technology change is too fast.

IT professionals believed that only half or less than half of users were satisfied with the rate of



technical change. The rest were dissatisfied. Overall, more people were reportedly dissatisfied with the "too slow" rate of change than were dissatisfied with the "too fast" rate of change.

SOURCE: "USERS DISSATISFIED WITH RATE OF IT CHANGE: NORMS, MODELS, TESTS AND ACTION"; BY TOM AUSTIN; GARTNER RESEARCH REPORT # G00157291; 23 MAY 2008.



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**PHYSICAL INFRASTRUCTURE****RPC 18****8 Receptacle Power Control / Monitoring w/Trans Switch**

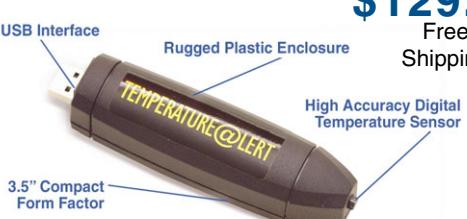
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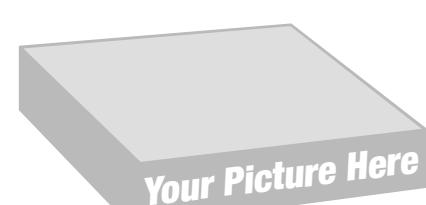
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## PRODUCT OF THE WEEK

# Seal Cable Openings For Better Efficiency

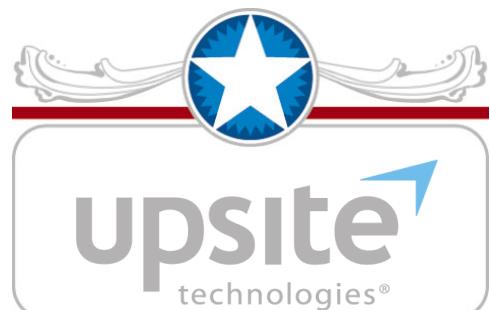
## Upsite KoldLok Mini Adds New Option For More Flexibility

by Sue Hildreth

• • •

**SMALL DETAILS CAN MAKE a big difference in a data center's energy efficiency. Just as cracks in a house can drive up heating and air conditioning bills, so, too, can chinks in the data center design create higher energy costs. One such common chink in the IT environment is openings for cables, which are often unsealed and thus allow cold air to leave the data center along with the cables.**

To help stem this loss, data center companies sell floor grommets to seal some of those unplanned openings.



### PRODUCT OF THE WEEK

#### UPSITE TECHNOLOGIES KOLDLOK MINI RAISED FLOOR GROMMETS

**Description:** Raised floor grommets that can seal 4- x 6-inch cable apertures in data center floors, preventing cold air from escaping out the opening. Made with fire-rated resin and filaments, the small-sized grommets offer a solution for separating power cables from data cables—a need that is not always met in a cost-effective way with standard-sized floor grommets.

**Interesting fact:** Each grommet has about 13,200 nylon filaments to block airflow while enabling passage of cables.

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"Power and cooling are big issues. Every little opening can increase the bypass airflow and decrease the efficiency of the cooling," notes Michele Galleazzi, product manager for Upsite Technologies' KoldLok product line.

#### Optimize Energy Usage

KoldLok raised floor grommets are designed to optimize energy usage in a data center by ensuring that cooled air does not get diverted out through unsealed cable openings. According to the company's Web site, an estimated 50 to 80% of cooled air does not reach the air intake of servers and other IT equipment because of unsealed cable openings.

"Floor grommets maintain the air pressure below the raised floor and reduce air leakage," says Michael Petrino, vice president of PTS Data Center Solutions, a data center consulting and design firm in Franklin Lakes, N.J. "They also allow cables to be removed and added on a regular basis and to maintain a seal against air leaks."

"Bypass airflow is the most prevalent cooling problem in computer rooms today," Petrino says. "Bypass air is that which escapes from areas not serving the load directly. It is wasted valuable cold air. It can be found at every cable penetration through the raised floor that is not properly sealed with a brush-grommet."

KoldLok raised floor grommets work by using intermeshed nylon filaments (brushes) to block the flow of air while allowing a cable to pass through. They come in a variety of types to fit different areas of the data center, such as along the edge, in corners, and in the center of a tile.

#### Different Sizes, Different Options

The newest addition to the KoldLok line, the Mini Raised Floor Grommets, give data center planners an extra option for dealing with smaller cable openings. The Minis are for 4- x 6-inch apertures, while the standard KoldLok grommet size is 4 x 8 inches and the extended size is up to 7 x 24 inches.

Also, while all of the KoldLok grommets include a static dissipation feature, the KoldLok Mini Grommet is the only one that is also offered in a version without static dissipation, for use in higher humidity environments that are less likely to need static dissipation and, hence, may not want to pay extra for it.

According to Upsite, customers were increasingly looking for more flexibility in sizing the grommets, such as when an orga-



nization wants to separate cables of different types, which is the reason behind introducing the Mini version.

"We've experienced more customers with a need to separate the power cables from the data cables, so that interference is minimized," says Galleazzi.

The Mini also provides an alternative to situations in which only one or two cables need to be run. Traditionally, in those situations, an opening for just one cable wouldn't be sealed, thus resulting in a small amount of energy leakage.

"This is an opportunity to seal these openings with a different sized KoldLok product and contribute to the energy savings," Galleazzi says. "Data center managers are realizing that sealing even a small opening can have a positive effect on existing cooling unit capacity."

## KEEP YOUR DATA CENTER COOL

Upsite Technologies offers these tips for reducing or eliminating bypass airflow and improving energy efficiency:

- Seal the computer room envelope
- Seal openings in the raised floor
- Install internal blanking panels, end-row panels, and over-the-top blockage
- Tune computer room cooling

#### High Efficiency

Though smaller, the Minis are extremely efficient in stopping energy loss, according to Upsite. They can prevent the loss of up to 98% of bypass airflow in areas where no cables are threaded through the filaments and up to 95% when used with a 1-inch cable. The smaller coverage and shorter fibers also mean that the fibers won't sag as longer filaments may if not supported.

"Because the cable opening is so small, we maximized the sealing effectiveness by angling the brushes," says Galleazzi. "The surface area of the brushes is increased because of that angle, and the additional surface area provides a better seal."

Each grommet has about 13,200 filaments made of premium-grade nylon Type 6, to ensure flexibility and self-sealing recovery. The frame is made of molded PC/ABS plastic. Both the filaments and the frame meet the UL94 VO fire rating.

PTS Data Center Solutions' Petrino notes that separating cables into smaller bunches is a good practice, not just to prevent interference but to prevent gaps developing in the grommet filaments.

"Cables need to be separated. A bulk feed or group of cables can create a gap in the brush opening," he says.

In addition, he would strongly recommend regular maintenance on the brushes to make sure they are evenly feathered and maintain a good seal around the cables.

"It's a great solution on the day of installation, but if it's not maintained, it can quickly become a wasted effort," he says. □

**An estimated 50 to 80% of cooled air does not reach the air intake of servers and other IT equipment because of unsealed cable openings.**

## Need to stay on top of the data center /IT industry?

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Information is updated regularly, so be sure to check back often!

# Product Releases

## CLIENTS

■ **Glacier** has announced Everest, its new line of rugged harsh-environment computers made specifically for extreme conditions such as forklift and fixed-mount applications. The Everest computers have a 10.4-inch or 12.1-inch screen and an array of processor options ranging from a 600MHz Celeron up to a 1.4GHz Pentium M. They also provide up to 1GB DRAM. Everest can operate using Windows XP Pro, Windows XP Embedded, Windows Vista, or Linux. The Everest also offers 802.11a/b/g LAN, WAN, and GPS options. In addition, the computers are HALT tested and have passed thermal and reliability testing.

■ Platform stability, cost-effectiveness, and environmental friendliness are the buzzwords at **Lenovo** as it debuts its new business PC. The ThinkCentre A62 is based on AMD's business-class CPU for a long buying cycle. It features Lenovo's Dash 1.1 remote management feature and Express Repair corruption recovery utility. Options include DisplayPort support and a low-wattage (15W) processor. Prices start at \$399.

■ **Microscan** has released a new QX Platform it says combines Quick Connect and X-Mode technologies to provide high-performance barcode reading along with simplified connectivity and networking for industrial automation locations. The QX-830 compact laser scanner is the first product within the platform. Microscan says the QX-830 is the only data-acquisition device that has Quick Connect technology, a streamlined setup and connectivity feature provided by M12 Ultra-Lock connectors from Molex. In addition to simplifying setup and deployment of single and multiple reader networks, the QX platform aims to reduce the number of accessories needed for multiple reader networks.

■ **Motion Computing** announced two new options that improve the usability and security of the F5 Tablet PC and C5 MCA (Mobile Clinical Assistant). The new smart card reader lets companies improve the security of data by enhancing authentication processes. The EasyConnect USB/Ethernet module allows for easy connection to other devices or local-area networks without sacrificing the durability and protection offered by the rugged tablet PCs. The optional, integrated smart card reader, manufactured by ITG OMNIKEY, supports WinXP and Vista and features an ExpressCard interface and a transmission speed of 12Mbps.

The EasyConnect USB/Ethernet module is lightweight, easily connects to the devices' docking connectors, and features one USB 2.0 port and one 10/100 Ethernet port. In addition, Motion announced the new F5 DPP (Display Protection Plan). Adding to the F5's three-year, field-ready warranty that covers damage from short drops and ordinary course exposure to rain and dust, customers can now purchase the DPP additional coverage that allows them to have eligible damaged displays replaced at no charge, including shipping.

Motion Computing also announced upgrades to the LE1700 Tablet PC. The LE1700 is a semi-rugged tablet PC with a 12.1-inch display that is designed to be used while walking or standing. Enhancements to the LE1700 include an additional Intel Core 2 Duo processor option, enhanced UltraView and UltraView Anywhere displays, and a 64GB SSD (solid-state drive) option. Other options available with the LE1700 include embedded mobile broadband, a biometric fingerprint reader, an attachable extended

battery, a convertible keyboard, and a PC card slot.

■ **Tyco Electronics** has announced the Elo TouchSystems 1900L and 2200L, a pair of high-resolution LCD touch monitors. The monitors feature zero-bezel wide-aspect ratio views with a 100% useable surface area in an effort to create work surfaces that look less like computer monitors. The Elo TouchSystems are powered by APR (Acoustic Pulse Recognition) touch technology and are designed for high-traffic retail, hospitality, and other public environments. Virtually any kind of stylus, such as a fingertip or the edge of a credit card, can be used on the screens. Features include VGA and DVI video ports, touch-interface USB (APR) and serial jacks, AC/DC power, and audio headphone jacks.

## MESSAGING & TELEPHONY

■ **3CX** announced the free 3CX VoIP Phone, which allows users to make and receive calls from their computer. The 3CX VoIP Phone has many useful features such as an intuitive interface with a dial pad and buttons for call forwarding or transfer. Users can also review their call history; put calls on hold; and easily accept, reject, or ignore calls with a mouse click. Other features include SIP profile support; personal call log/history; message waiting indication; and G.711, GSM, iLBC, and Speex support.

■ **GFI** has released version 6 of its email management and archiving MailArchiver for Exchange software. MailArchiver 6 integrates with Microsoft Outlook, letting users access archived email more quickly and more transparently. The company says the software is also the first email archiver to offer Outlook integration without using stub files, thus reducing the load on Exchange servers. MailArchiver archives all corporate email, reduces dependency on PST files, lets users access old and deleted email at any time from any location, and allows companies to meet eDiscovery and legal requirements. The company is offering buyers a 25% discount on new purchases of GFI MailArchiver 6 through this month.

## NETWORKING & VPN

■ **BMC Software** released several new offerings designed to help users manage, plan, control, and automate multivendor virtualized IT environments. The new platforms are based on BMC's Closed-Loop Change and Configuration Management process workflows and include the BMC Virtualization Capacity Management and Planning Service, BMC Performance Management, BMC Application Performance and Analytics, BMC Capacity Management, BMC Discovery Solution, BMC BladeLogic Virtualization Module for Servers, BMC BladeLogic Operations Management Suite, BMC Run Book Automation Platform, and BMC Run Book Automation VMware Adapter. All of BMC's latest offerings support both virtual and physical infrastructures.

■ **Citrix** has released the Xen 3.3 engine for download. This rapid scalable engine provides a high degree of multiplexing and offers flexible resource management for data centers. Xen 3.3 supports virtualization for x64, IA64, and ARM-based platforms. The memory ballooning feature allows for dynamic memory placement between VMs. Xen 3.3 complies with the new Xen Client Initiative for compatible Xen hypervisors for laptops, PCs, and PDAs. This partnership is ideal for embedded IT with remote support, PC security, and PC application allowance.

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## SERVICES

JULY 25, 2008

# Green Data Destruction

## D3's New D3eraSE Service



**DATA DESTRUCTION** and green recycling efforts are often at odds with one another. Now, thanks to the new D3eraSE service from D3 (Digital Data Destruction Services), IT managers have another option for securely destroying data without permanently destroying the media on which it is stored.

D3eraSE is a Tier 4 electronic data destruction process that permanently removes all data stored on a hard drive or flash media in such a way that data recovery is impossible, yet the media is reusable. Because the D3eraSE service is more secure than simply overwriting the data, the NIST (National Institutes of Standards and Technology) classifies D3eraSE as acceptable for confidential documents. D3eraSE has also been accepted by the Department of Defense

for use with media containing data that's labeled as secret information.

In contrast with Tier 3 destruction or Department of Defense Directive 5220.22 triple-pass overwriting, which leaves the opportunity for up to 10% of the data to be forensically recovered, the D3eraSE Tier 4 service eliminates the possibility of forensic recovery.

D3eraSE's Tier 4 services provide a less extreme alternative to Tier 5 data destruction services that completely disassemble, degauss, and recycle hard drives. Plus, because media is still usable after using the D3eraSE Tier 4 service, customers can save thousands of dollars by reusing their existing stock of hard drives and flash media.

### Digital Data Destruction Services D3eraSE

Permanently erases data on storage media, making the media reusable and rendering data recovery impossible

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## SECURITY

JULY 25, 2008

# Real-Time Threat Detection

## Intellitactics Security Manager Streamlines Incident Handling



Intellitactics Security Manager can provide reports to validate compliance with regulatory standards, internal policies, and industry best practices.

enabling IT to streamline incident handling and providing reports that verify and validate compliance with regulatory standards, internal policies, or industry best practices.

Intellitactics' AIR (Active Integration and Response) program provides for the expansion of the security ecosystem through integration with leading-edge security products that leverage Intellitactics Security Manager's analysis of data sources. Security Manager's analytical engine generates notifications of threats. The integration of Security Manager with complementary security technologies provides the security team with a more complete picture and helps to better protect the enterprise and comply with regulatory standards by simplifying the ability to monitor, analyze, take action, and report on security-related events.

### Intellitactics Security Manager

Consolidates and analyzes data from security devices, OSes, and applications

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## Product Releases

*Continued from Page 17*

■ **Endace** has unveiled new features for NinjaProbe, which is an appliance that can now help to confine, collect, and replay network traffic at speeds around 10Gbps. NinjaProbe is launched by network operations and security officers as amalgamated monitoring tools, while it also drives a full range of chosen monitoring programs. Additionally, NinjaProbe observes packets on network links, making copies of each packet for the system memory. Then it adds a time stamp with quick granularity. NinjaProbe includes onboard storage expandable to 128TB, and it can keep days, weeks, or months of information.

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■ **Fluke Networks** has announced the release of Visual Performance Manager 4.0, which the company says improves delivery of business services by detecting the root cause of networked application performance issues using a new Application Performance Solution and patented software analytics engine. The new performance component makes it easy to identify applications performing poorly, provides individual client/application response metrics, and simplifies troubleshooting and reduces mean-time-to-repair of multitier applications through time correlation of transactions on multiple tiers. Additionally, Visual Performance Manager 4.0 lets IT departments focus resources on solving critical problems using more efficient methods of handling exception incidents.

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■ **Novell** announced Novell ZENworks Application Virtualization, a tool that eliminates application compatibility problems on Windows desktops. This addition to the

ZENworks product line creates virtual applications in an isolated file and allows them to be deployed and run securely, reducing the problems associated with deploying new operating system platforms such as Vista, decreasing service desk calls, and increasing user productivity. Compatible with Windows Vista and Windows XP, ZENworks Application Virtualization reduces the cost and time required for software testing, packaging, deployment, configuration, and contingency planning to ensure successful application and operating system upgrades.

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■ **Shavlik** has released Shavlik NetChk Protect 6.5, a virtual machine management tool that is designed to give nonstop patch assessment and remediation of a virtual environment. Shavlik NetChk Protect 6.5 incorporates Shavlik's Any Patch/Any Where assessment technology to automate nonstop patch evaluations and deployments, as well as offer offline virtual images. Through constant identification, correcting holes in security, and finding redundant overlaps, Shavlik NetChk Protect 6.5 offers organizations tougher protection.

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■ **SMC Networks'** EliteConnect 2.4GHz 802.11g Wireless Hotspot Gateway (SMCWHSG14-G) is now available. The SMCWHSG14-G is designed as a multi-functional, manageable, all-in-one hotspot package that brings affordable networking to enterprises of all sizes. Customers are provided with secure, password-protected Internet access, and enterprises can use the service as a way to attract customers or to generate revenue. Features of the SMCWHSG14-G include the ability to support 100 simultaneous users, a 4-port 10/100Mbps LAN switch, and a Web-based

interface for setup and management. The device's comprehensive security features include a NAT firewall, MAC address filtering, 64- and 128-bit WEP and WPA encryption as well as authentication, authorization, and accounting services for clients.

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■ **SolarWinds** released Orion NCM (Network Configuration Manager) v5, the newest version of its network change and configuration management software. Formerly known as the Cirrus Configuration Manager, Orion NCM v5 extends the software's monitoring, alerting, and reporting capabilities. Additionally, engineers can proactively monitor enterprise-wide configuration health indicators alongside key network performance statistics. Orion NCM v5's side-by-side view allows network engineers to make direct correlations between configuration changes and network events. The software integrates fault, performance, and configuration management, and Orion NCM v5 can scale to meet the enterprise's needs. v5's point-and-click interface lets enterprises visualize the health and status of enterprise-wide configurations, including device details, configuration backups, and policy violations.

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■ **Xsigo Systems** released VP780 x2, an enhanced version of Xsigo's VP780 I/O Director. The VP780 x2 delivers 20Gbps of bandwidth to each server, and users can monitor and manage their I/O topologies from a single view that extends from the virtual machines to the physical switch ports. The improved data center I/O management capabilities of the VP780 x2 include traffic statistics that are accessible through third-party tools, and a faster server connect speed allows for greater throughput and increased VMotion performance. The

VP780 x2 also features greater SAN and iSCSI boot capabilities to let users boot any server from Fibre Channel or iSCSI LUN for fast repurposing of server resources. Xsigo's VP780 x2 incorporates a modular design that can adapt to new networks, servers, and interconnect standards.

### PHYSICAL INFRASTRUCTURE

■ **ATEN** has released the SN3101, a Serial over the 'Net three-in-one device server that supports RS-232, RS-422, and RS-485 data transfers and Ethernet connectivity. ATEN says the SN3101 enables secure and remote management of IT series devices, including servers, routers, PBX systems, telecommunications equipment, and serial-based power management appliances. Other features include Real COM port support, which lets devices connected to a virtual port appear as if they're directly connected to a COM port on a local PC. Application requirements that the single-port SN3101 meets include console management, TCP Server, TCP Client, UDP, Modbus, Serial Tunnel, and Virtual Modem. The SN3101 is available for \$999.95.

.....

■ **Innovative Research** has announced TileFlow 4.0, airflow simulation software that helps data center professionals analyze the cooling performance of their existing data centers. With TileFlow, data centers can identify and correct the cause of cooling problems. They can also use TileFlow to design new cooling systems for new data centers. TileFlow features thermostatic control for CRAC units, an expanded database of equipment, and the capability to import server rack information from Aperture Vista.

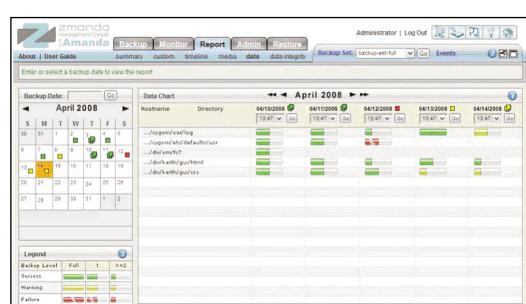
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### STORAGE

JULY 25, 2008

## Enterprise-Class Backup & Recovery

### Zmanda's Amanda Enterprise 2.6.4 Offers Powerful Protection With Easy Administration



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AS THE NEED FOR available data increases, budgetary and staff costs can prohibit some SMEs from acquiring or effectively managing backup and recovery products. They need backup and recovery apps that are easy and quick to install, are simple to manage, and have all the functionality an enterprise needs, all at a low cost. Amanda Enterprise is Zmanda's effort to provide a solution to this problem.

Amanda Enterprise 2.6.4 is the latest iteration of the software, an open-source product that uses only standard formats and tools instead of proprietary products. Backups can be made to a single Linux or Solaris master backup system from multiple systems. Supported platforms include Windows, Linux, Solaris, and Mac OS X.

Other new features of Amanda Enterprise include online backup support for Microsoft SQL Server, Microsoft Exchange, and Oracle databases and protection for Windows Active Directory. The software can restore a variety of hardware and virtual environments and uses Microsoft's Volume Shadow Copy Service to ensure reliability during hot backups so data access won't be impacted.

Amanda Enterprise supports a variety of backup media and methods. Data and archives can be stored on disks, tape, optical devices, or online storage services. The Department of Homeland Security has certified it is free of security defects.

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## Product Releases

■ Triple-play services in commercial or residential environments could benefit from centralized wiring, as it makes troubleshooting and voice/video/data deployment vastly easier. To this end, **Panduit** has launched its media distribution system. The system features a high-density design to support a high number of cables while decreasing the footprint of in-wall installations.

■ MasterConsole CAT KVM switch, a device designed to cost-effectively simplify server maintenance, is now available from **Raritan**. The MasterConsole CAT KVM switch supports two simultaneous and independent user sessions and is designed to offer administrators in small and midsized data centers flexibility with server maintenance. Having two workstations avoids the problem of administrators having to constantly traverse across data centers in order to conduct maintenance; the two workstations can be placed in strategic locations. Features of the MasterConsole CAT KVM switch include the ability to control eight to 16 servers and up to 256 connections with BIOS-level control.

### SECURITY

■ **Breach** has announced three PCI QuickStart packages to comply with Requirement 6.6 of the PCI DSS (Payment Card Industry Data Security Standard). PCI QuickStart-Core, PCI QuickStart-Pro, and PCI QuickStart-Enterprise all include the WebDefend security appliance, tech support, and PCI training. High-performance clusters are available for select packages only. Additionally, WebDefend offers real-time defense against system weaknesses. Application-layer scans ensure the identification of

defects, error messages, and leakages throughout the entire application.

■ **IBM** has announced the IBM BladeCenter PN41, a blade server that will help reduce security threats such as DoS (denial of service) attacks and viruses. The blade helps reduce threats by performing real-time analyses of network activity so that malicious traffic can be averted. The PN41 supports Deep Packet Inspection technology from CloudShield and applications from Check Point Software. IBM's BladeCenter PN41 will be available next month.

■ **Kerio** has introduced Kerio WinRoute Firewall 6.5, a corporate gateway firewall for organizations that includes link load balancing and failover capabilities. Kerio WinRoute Firewall 6.5 is designed to help organizations get Internet performances to the optimal level and boost reliability of business-critical application. Network traffic is distributed among several Internet connections via a new link load balancer, which increases availability and performance for users. Using a data flow algorithm, the Kerio WinRoute Firewall 6.5 determines real-time Internet utilization for links, permitting the firewall to prioritize traffic through less crowded Internet lines. Additionally, this tool can reroute Internet traffic in order to dedicate Internet lines for specialized applications such as VoIP or other forms of streaming media.

■ **Novell** launched a platform designed to help customers with the business challenges of meeting compliance mandates and securing their IT infrastructure. Balancing the need to support rapidly growing compliance

*Go to Page 20*

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**Power Consumption: The Main Culprits**

Identify The Biggest Guzzlers In Your Data Center  
by John Brandon

WITH THE KNOWLEDGE that specific hardware inside the data center is responsible for the most power consumption, IT can start addressing consumption issues. In an economic downturn, this is important because while power usage was always a lower priority for most companies during the past two decades (at least, lower than other top concerns), it is now a

make sense over the long term. traditional approach is just know hardware typically uses the most power when putting a plan in place those heavy-use culprits. Before we explain the top data center, we should i Go to Page

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## Product Releases

*Continued from Page 19*

requirements with shrinking budgets, the Novell Compliance Management Platform helps organizations monitor network events and remedy violations as they occur. The Novell Compliance Management Platform also allows organizations to integrate provisioning and access management policy with security monitoring to not only tie security to identity information but also automatically detect, report on, and remediate inappropriate and suspicious activities in real time. The Compliance Management Platform improves governance and security by enabling common access policies across all identity repositories and provides automated validation of preset business rules. In addition, the Compliance Management Platform automatically logs all network activity and delivers compliance reports in an audit-ready format. The Compliance Management Platform includes Novell's identity and security management solutions, identity-driven security and information events, identity management tools, and an identity resource kit.

■ **VASCO Data Security International** unveiled Digipass Go 7, a one-button authentication device that provides strong, convenient user authentication for network access or Internet banking. Digipass Go 7 allows users to remotely log on to applications, Web sites, and corporate networks. It helps combat Internet fraud by replacing static and paper-based passwords with dynamic one-time passwords. Digipass Go 7 can also work in conjunction with Digipass for Web to provide e-signature capability. The device has been adapted for mailing purposes to fit regular postal fees. It's less than 10mm thick and weighs less than half an ounce. With host authentication, Digipass Go 7 allows users to

authenticate the business partner to verify the authenticity of a Web site or application.

### STORAGE

■ **3PAR** announced the 3PAR InServ T400 and T800 Storage Servers, which feature the 3PAR Gen3 ASIC with integrated fat-to-thin processing. Designed for virtualized data centers, the offerings feature the latest version of 3PAR's InSpire Architecture, which lets them discover allocated but unused capacity and remove it from traditional volumes to improve capacity utilization. The InServ T400 and T800 storage arrays also feature support for 3PAR Fast RAID 5, a built-in RAID 5 XOR engine, and mixed workload support that lets users reign in traditional array costs.

■ **Adaptec** introduced its Adaptec Intelligent Power Management, a capability of select Adaptec RAID controllers that lets users customize the settings of the storage environment to slash power demands by as much as 70% without adversely impacting performance. The feature supports SATA and SAS drives and is ideally suited to the demands of disk-to-disk backup systems, email archiving systems, and file and print servers. The offering lets the systems shift between Normal, Standby, and Power-off states to save power. Intelligent Power Management is currently available in all Series 5 and Series 2 Unified Serial RAID controllers.

■ **AmeriVault** launched its hosted disaster recovery service for iSeries servers. When a disaster occurs, AmeriVault's Virtual Disaster Recovery service, RestartIT-VDR iSeries, provides a remotely accessible failover site for tapping into the managed

virtualized iSeries recovery environment. RestartIT-VDR for iSeries lets users access the virtualized iSeries environment for up to 30 days following the declaration of a disaster. Other benefits include virtual warm recovery servers, no capital expense for recovery servers, remote recovery initialization capability, recovery testing, technical support, and training.

■ **COPAN Systems** has partnered with **Quantum** to establish an unstructured data management solution. This effort joins together Quantum's StorNext data management software and COPAN Systems' Enterprise MAID (massive array of idle disks). Companies can store up to 896TB of fixed data in under 1 square meter. StorNext is capable of optimizing performance levels via drive spin-up and spin-down control. Additionally, it supports data sharing from Windows, Unix, Linux, and Mac OS platforms. David J. Donald, CEO of Keeper Technology, says, "Access is provided through the StorNext File System from Tier-1 disk, typically high-speed Fibre Channel-based RAID systems containing 'dynamic' data. StorNext Storage Manager extends this capacity to a COPAN platform allowing our shared customers in the federal sector substantial file-based scalability."

■ **CRU-DataPort** has announced the release of SAS/SATA desktop and desk-side storage enclosures. Professionals can utilize this solution for disk-to-disk backup and disaster recovery. CRU-DataPort offers 2- and 4-drive bay models for the following three removable drive carriers: DataPort 10, Data Express DX115, and Data Express DE110. All drives support 3.5-inch SAS or SATA drives and RAID configurations, such as RAID 0, RAID

5, and JBOD. The CRU SAS/SATA enclosures are designed for low-noise operation with cooling and exhaust fans.

■ New from **Enhance** is the UltraStor RS8 IP-4 for high-volume networked storage. This 4-port iSCSI SAN array offers Gigabit Ethernet speed and RAID 6 support for up to eight enterprise-class SAS and 3Gbps SATA drives. The expandable 2U system features a 64-bit Intel RAID engine with up to 2GB cache, plus redundant power supplies and hot-swappable drive trays and fans.

■ Two 42-drive RAID 6 systems are available from **Sans Digital**, providing up to 42TB with current hard drives. The AccuRAID AR442F4 and AR442F4R are 4U rackmount systems that use two Fibre Channel interfaces each. The single-controller AR442F4 features triple redundant hot-swappable PSUs and a pair of hot-swappable fans. Meanwhile, the AR442F4R offers "active-active" redundant controllers for mission-critical environments such as data centers.

■ **StoredIQ** announced StoredIQ V4.6, which offers expanded platform integration support and enhanced eDiscovery functionality. Platform support for Microsoft Exchange 2007 and SharePoint 2007 lets IT staff insert, retrieve, and manage information on the platforms. Users can insert unstructured information as records and place items under litigation on hold for the most current version of EMC Documentum. In terms of eDiscovery capabilities, StoredIQ V4.6 features improved query report analytics, the ability to harvest additional email server objects, support for the EDRM XML V1.0 load file format, and enhanced usability and productivity for precollection investigations.



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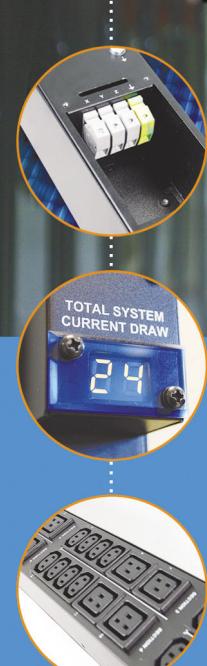
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## PROCESSOR

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# Considering Preowned Equipment

A Data Center Doesn't Need The Newest Technology To Run With Efficiency & Productivity

by Elizabeth Millard

OLDER EQUIPMENT doesn't run as well as new, breaks easily, has a limited lifespan, and requires far more time and effort for management—these are just a few of the misconceptions that John Sheldon, of Network Hardware Resale ([www.networkhardware.com](http://www.networkhardware.com)), hears from potential customers.

"Even some of the manufacturers put out wrong information about preowned equipment," he says. "They're tainting their own products unnecessarily. Used equipment can last forever, and you can get it for up to 75% less than new, just because it's a second-generation product."

Some companies demand no less than the cutting edge in terms of data center equipment—frequently swapping out yesterday's tech for this month's recent development. But for many enterprises, particularly small to midsized enterprises, that kind of high-turn doesn't make sense. Instead, a



mix of preowned and new equipment can maximize budget dollars without adding to maintenance schedules.

### Maintenance Myth

It's a commonly held belief that older products require more care than new ones. After all, a car with 150,000 miles tends to need a bit more than an occasional oil change. But with preowned equipment, that type of thinking is often incorrect, Sheldon believes.

"We have clients who've had our equipment for five years or longer, and we never hear about any problems," he says. "It's not like this equipment has a limited shelf life like other types of products."

If the equipment is from a reputable vendor, such as Cisco or IBM, there isn't a sense of "planned obsolescence" that comes with other types of products, such as vacuum cleaners or laptops.

"Certain technology products were built to last, and so they do," Sheldon adds. "And if you encounter one that doesn't, a reputable company will have it backed up with a warranty."

### Watch Out

Making sure that the warranties offered by preowned equipment dealers are adequate is important.

Go to Page 10

## Moving From Tape To Disk

### The Challenges Of Changing Backups

by Robyn Weisman

MANY SMEs STILL treat backup as if they are using a VCR that flashes "12:00 AM." While tape-based backups are reliable and cheap, they, like videotapes, require the user to rewind or fast-forward to recover, say, a lost spreadsheet.

Research firm IDC predicts that the digital universe in 2011 will equal almost 1,800 exabytes (1.8 trillion gigabytes), 10 times the size it was in 2006. If trying to find that spreadsheet within your tape backups is tedious now, imagine trying to locate it a few years from now amid your petabytes of data.

As a result, more and more SMEs are considering disk-based backup as a long-term solution. "Compared with tape-based storage systems, disk-based storage delivers an order of magnitude benefit in terms

of restore and recovery times. Restore operations that once took hours or even days now can take minutes," says Philip Fote, storage product marketing manager at EMC ([www.emc.com](http://www.emc.com)).

But migrating to disk-based backup is expensive. It often requires a new infrastructure. And if you intend only to set up an onsite disk-based backup solution, you may find that you lack the physical space to keep all those drives. Given the complexity and urgency of the situation, where do you even begin?

### Know What You Are Backing Up

First off, make sure you understand what you are backing up. "This seems easy, but people rarely do. They get into habits," says David Barley, CTO of digital archiving services provider Casdex ([www.casdex.com](http://www.casdex.com)). "That's the way we've always done it" is the million-dollar mistake.

EACH WEEK

# Testing, Testing, 1-2-3

## Set Up A Testing Environment To Protect Your Network

by Sandra Kay Miller

**AS IT INFRASTRUCTURE** has become mission-critical to business today, gone are the practices of "plug-and-pray," or installing new updates, patches, and applications directly into production environments. "It only took one instance of bringing down an entire global network for a few hours due to newly deployed yet incompatible hardware for our company to finally justify the cost of a parallel testing environment," explains David Servo, a 17-year veteran at a large petrochemical company's data center in the Midwest.

Servo's testing environment has grown and worked in tandem with his organization's network for more than 15 years. "It's allowed us to accomplish a number of things that otherwise could negatively impact our overall business performance," he notes.

According to Servo, the test lab at the data center has helped determine interoperability and impact on current infrastructure and applications and allowed for performance testing. The biggest advantage has been its use in pilot programs for making purchasing choices for new equipment and software. "On several occasions, the sales pitch from the vendor sounded too good to

be true, and when we got the product into our testing environment, we found that to be the case," he says.

For organizations that have multiple workstations on their networks, a test lab can also be effective in the evaluation and creation of standardized configurations.

### Getting Started

Vikram Phatak, CEO at NSS Labs ([www.nsslabs.com](http://www.nsslabs.com)), an independent lab specializing in security and performance testing, offers the following general rules for creating a new lab or updating an existing one. "First, you want to create a lab that

found them to be able to handle just about everything. For smaller organizations, he adds that the free VMware Server (formerly GSX) can work just as well.

"The beauty of VMware is that you can do a P2V (physical-to-virtual) conversion that duplicates your live infrastructure very easily," Phatak says. He also notes that a key feature of VMware technology is the ability to "lock" an image so that if it is infected with a virus or otherwise "broken," you simply reboot the VM, and it reloads as if nothing happened. "This is a great boon for any security testing or compatibility testing where loading an application can break another," says Phatak.

For those looking to test the performance of complex applications at high speeds, Phatak suggests investing in tools to simulate similar traffic loads of the production network for determining how various applications and devices will behave under load. While these types of tools can be expensive, he countered that they are worthwhile, especially for large-scale environments.

Thanks to virtualized testing environments, a lab today does not have to contain multiple systems. However, keep in mind that memory is the key limiting factor when

**For organizations that have multiple workstations on their networks, a test lab can also be effective in the evaluation and creation of standardized configurations.**

is as 'real' as possible. I strongly recommend getting VMware's virtualization tools to replicate the environment you want to simulate." Although Phatak warns that the VMware ESX Server and VMware Infrastructure Server can be costly, he has

it comes to virtualization, with processing power running a close second. "Generally speaking, you can expect to run one virtual machine per 512MB of memory on a host system," suggests Phatak from his experience. That means a single server with

32GB of RAM can run up to 64 VMs. Of course, more complex systems will require more memory, whereas simple desktop VMs will require less.

Phatak notes that there should be roughly 200MHz of processor per VM. This means that organizations could re-create a reason-

## Test Lab Essentials

Here is a list of the basics that should be included in a testing environment

- VMware to create a virtual testing environment
- Network protocol analysis and inspection tools for live capture and offline forensics to network traffic
- GbE switches with the ability to redirect traffic through a passive network tap
- Battery backup for the virtual infrastructure
- Routers if the network you are looking to replicate has multiple routed subnets

able facsimile of a basic network with as few as four very robust servers.

While many organizations have utilized outdated and excess equipment for testing labs, Servo warns against this practice. "Because we were originally testing on older equipment, we were unprepared for the incompatibility that led to our downtime. When staying online is paramount, it's best to use identical systems in your testing environment," he says.

Servers and VMware in place, Phatak lists the next necessary piece for a testing lab—storage. He suggests either an NAS or SAN for the storage of VMs. "A low-end NAS can cost as little as \$2,000 for 4GB of storage. A SAN is more expensive

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# IT Asset Disposition

## Why It's Important & What You Need To Be Doing About It

by David Geer

• • •

**IT ASSET DISPOSITION**, or ITAD, is all about how you retire old equipment. Today, IT asset disposition is seeing tremendous growth. According to Cliffie McKay, director of operations at DMD Systems Recovery (877/777-0651; [www.dmdsystems.com](http://www.dmdsystems.com)), "The biggest growth has been because of the 'Go Green' initiative everyone has. A lot of companies are trying to meet standards from CIOs and CFOs requiring that equipment be recycled instead of just sitting around in order to make sure it doesn't end up in the wrong hands or in a dumpster."

### Asset Disposition's Growing Importance

Because of this growth, enterprises are taking asset disposition more seriously. Companies are taking IT asset disposition so seriously, in fact, that they are factoring the costs (and savings) related to proper equipment disposition into the TCO and initial purchasing decisions around not only data center equipment and servers but

also PCs, laptops, and even cell phones, according to Chris Adam, director of IT asset disposition services at Converge ([www.converge.com](http://www.converge.com)).

Brand image and environmental compliance are also making asset disposition a priority. There are steep fines for missing the mark with environmental compliances, according to Adam. Enterprises don't want their brands in the news due to some equipment that was sold to employees and eventually discarded into the dumpster, Adam explains. "Those can be traced back to the enterprise, and it's their liability," he notes.

These may seem like pain points only for large organizations, but not so. SMEs have the same risks around IT asset disposition as large companies do, if not more so, according to Jeff Clark, vice president of business development at Apto Solutions ([www.aptosolutions.com](http://www.aptosolutions.com)). "The fines are the same regardless of whether you're a \$2 million company or a \$2 billion company. However, the impact is greater when you're smaller. The same applies with the benefits," he says.

### IT Asset Disposition Checklist

Being in the phone book does not a good IT asset disposition company make, though it is a good place to start. Here are some key things to consider when looking for a qualified company.

**Check for references.** "Take time to interview and explore references on a handful of recycling and remarketing firms," says Corey Donovan, vice president of Vibrant Technologies ([www.vibrant.com](http://www.vibrant.com)).

**Verify tracking.** There is no guarantee that hackers won't recover precious data until the hard drive no longer exists. "Use a service that allows you to follow your assets through the

process, that they have proof of full chain of ownership for compliance," says Chris Adam, director of IT asset disposition services at Converge ([www.converge.com](http://www.converge.com)).

**Start your search locally.** "The biggest thing is for them to find someone local," says Cliffie McKay, director of operations at DMD Systems Recovery (877/777-0651; [www.dmdsystems.com](http://www.dmdsystems.com)). The smaller the company is, the harder it is to help them benefit from IT asset disposition because their equipment is older and there isn't much of a quantity there, McKay explains. If they go local, it may be easier to find a company that can service them.

Asset disposition has become a necessary component of data security, as well. Companies now require data destruction for hard drives as well as proof of data eradication, including video monitoring of data destruction and audits as proof of data erasure, according to McKay.

### Finding The Right Company

"SMEs should take a thorough inventory of their assets. They need to know what their obligations are. They need to define their corporate tolerance for risk," says

Some companies choose to sell off IT assets themselves, but this can be risky. "They will choose a recycler for broken equipment and then try to auction off the rest," Clark notes. But, SMEs are liable if the equipment ends up in a landfill or an export-restricted country.

"These auctions are the least profitable way to get a return on their investment. Only wholesalers buy at these auctions, and they usually pay 30 to 60% less than the fair-market value of the IT asset," Clark says.

And while the major OEMs have buy-back programs for end-of-life equipment, they may offer less than a company that specializes solely in IT asset disposition, according to Clark. A vendor who is competent with all IT assets can serve as a

**By choosing a single vendor,  
one who will pay the most for equipment  
and provide the best service,  
SMEs get the best overall return.**

Clark. An SME's choice for implementation is warranted if the risk of data exposure is higher than the cost of an IT asset disposition implementation.

But, the vendor should be able to prove they can help eliminate that risk. "When selecting someone to implement, look at what kind of liability protection they will provide if there is a data breach on the disposed equipment," says Clark.

To ensure that liability protection—and the rest of their services—choose an asset recovery firm with a solid record of accomplishment and a clear window into their processes. "The asset recovery provider should be completely transparent with their processes," says Clark.

While they are window-shopping, SMEs will want to locate two options for IT asset disposal. "The asset recovery or recycling firm will serve the SME's needs for disposing of nonuseable or non-value assets. Enterprises should run any assets of possible value by an IT remarketer. They will offer you cash or credit for your goods," says Corey Donovan, vice president of Vibrant Technologies ([www.vibrant.com](http://www.vibrant.com)).

buffer against liabilities around disposal and may provide the best return.

By choosing a single vendor, one who will pay the most for equipment and provide the best service, SMEs get the best overall return. "In most cases, the asset recovery firm's costs are taken out of any recovery dollars gained by remarketing the assets that have value. Therefore, it's a no-cost scenario and usually, a gain back to the company, since their assets have already been fully depreciated," Clark says. □

### IT Asset Disposition Value

Phased-out computer gear has hidden financial value, according to Chris Adam, director of IT asset disposition services at Converge ([www.converge.com](http://www.converge.com)). Some companies can totally or at least partially fund their IT asset disposition plans with the money they get back from computer parts and systems that they thought were obsolete and held no value, he notes.

## Testing, Testing, 1-2-3

*Continued from Page 23*  
but definitely required for larger virtual infrastructure build-outs."

Lastly, for an effective testing environment, there needs to be a robust networking component. Phatak suggests a minimum of three GbE NICs per server per 16 VMs. That means for a server hosting 64 VMs, it

should contain 12 NICs—four for the storage network, four for the management network, and four for the test network.

### Policy & Control

As IT functions have become tightly integrated with business units throughout the enterprise, chances are there may be

requests from outside the normal scope of IT to utilize the testing environment.

"I was a little shocked the day the head of our human resources department showed up and asked us to install two competing products they were evaluating. Then they went on to request that several of their employees be given access to our test bed since they would ultimately be the ones using the system," says Servo, who had to intermediate between his

staff who initially became territorial over this request.

Recognizing that governance of a testing lab can become a political issue, Phatak also points to the technical ramifications and suggests that a dedicated staff be assigned to the lab. "There should be at least one administrator for the VMware environment and another for the performance testing. I would then suggest a liaison to the lab from the appropriate stakeholders." □



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# Keys To A Successful Employee-Owned Notebook Program

## Programs Can Offer A Sensible Alternative To Company-Mandated Gear

by Sixto Ortiz Jr.

**IN TODAY'S CORPORATE WORLD**, companies usually supply their employees with the equipment they need to get their work done. Technology is central to today's business, so that means employers must provide their rank-and-file employees with technology, such as desktop and/or notebook computers.

But as Bob Dylan once said, "the times, they are a-changin'"; in many businesses, employees are asking employers to use their personal notebooks for work. And some employers are accommodating their employees' requests to establish employee-owned notebook programs. It seems like a good idea for employers, who can expect to save dollars as employees help pony up cash for notebooks of their choosing and use them to do the company's business.

However, this good idea is not without its pitfalls. As with most technology initiatives, setting up an employee-owned notebook program requires some level of preparation and thought prior to launching these initiatives. Read on to learn more about employee-owned notebook

programs, the pitfalls to avoid, and the keys to success.

### Employee-Owned Notebooks: Why?

The very existence of employee-owned notebook programs means employees are willing to at least spend some of their money to use their own equipment to do the company's work.

Leslie Fiering, a research vice president at Gartner, says performance is a strong reason why employees might want to use their own notebooks for doing company work. For example, a developer may be

Also, adds Fiering, some employees who travel frequently may want to use a lighter model than what the company offers, while some executive-level employees may want to carry the latest and greatest technology, even better than that offered by the employer. And, some employers may feel that the only way to capture and retain top talent is to offer concessions to potential and current employees, including the allowance for the use of personal notebook computers to do company work.

### Keys To Success

A key to running a successful employee-owned notebook program, adds Fiering, is understanding that the right infrastructure must be in place to support these

**[The very existence of employee-owned notebook programs means employees are willing to at least spend some of their money to use their own equipment to do the company's work.]**

asked to do computationally intensive work on a four-year-old notebook provided by his employer, when he personally owns a much faster computer that is better suited to that task.

programs before they ever get launched. So, security elements such as network access control, strong authentication, MAC level addressing, and activity monitoring are needed to protect the network, control the traffic that enters it, and prevent malware from penetrating key corporate systems. In other words, administrators can't successfully launch such a program without properly preparing their network infrastructures for what is potentially a very disruptive change.

"You can't simply tell people to go buy notebooks and allow anarchy," she adds.

Another key to success, adds Fiering, is the use of virtualization, for example, to ensure that the company's system image resides in a protected virtual container so company digital assets are completely separated from the employee's own system. There can be no data leakage whatsoever, she adds, between company and employee systems.

Fiering also recommends that administrators provide employees with a stipend to guarantee that purchased laptops have the right level of performance required for company applications. For example, if a

laptop needs enough horsepower to properly support virtualization, the stipend can close the gap and allow the employee to purchase a sufficiently powered notebook.

Fiering notes that there needs to be third-party support made available to users who participate in these programs. Gartner recommends that administrators talk to their third-party maintenance and support suppliers to create group programs that employees pay into if they wish. Of course, users have the option to opt out, but the company needs to make something available for support.

Finally, she says, there must be very clear-cut policies that specify who can buy these systems, what these systems must look like, and what the expectations are from management as to what these systems are expected to do, etc.

### Security: Potential Rain On The Parade?

The issue of security, some experts feel, may be very tough to overcome. David Stelzl, a certified CISSP and author, says data users represent the largest hole in the security strategy, so effectively securing personally owned equipment may prove impossible.

"Personally owned systems," he adds, "will likely be used for both work and pleasure, increasing the risk of data loss through peer-to-peer networking applications, surfing of insecure Web sites, and less control over the use of freeware and shareware programs, which may contain malware."

Fiering says the potential conflict between personal and corporate use may eventually be decided in the legal arena in those cases where users may choose to download or view objectionable content on personal notebook computers that are used for doing work. But, if corporate and personal systems are properly separated, the risk of liability for employers may be minimized.

Again, adds Stelzl, policies and standards will be needed to limit liability and drive architecture. "With the advent of personally owned systems," he adds, "it is imperative that managers first consider the value and risk associated with data and add specific policies and standards to cover this emerging area of computing."

### Be Prepared

Employee-owned notebook programs make plenty of sense, both from a corporate support and an employee perspective. Employees are happier and more productive when they use the notebook computers they're happy with, while administrators can shift IT personnel responsibilities from day-to-day support to more strategic tasks. But, before implementation, administrators should ensure they are properly prepared, both in terms of technology and the policies and procedures necessary to provide solid, effective governance. □

## Best Reasons To Implement Employee-Owned Programs

### Embrace the inevitable.

According to Gartner survey results, many companies are seeing increasing numbers of employee-owned, unsanctioned notebooks. Employers should embrace this, not ignore it.

**Retain talent.** Many employers are eager to capture and retain talented employees. Allowing for the use of personal laptops for doing company work can be a compelling perk to lure talent.

**The technology is here.** The widespread adoption of virtualization means employer system images can be properly segregated from personal systems, preventing the potential for data leakages from work to personal systems.

**Stay ahead of the technology curve.** Technology-savvy employees can become de facto trailblazers at their companies, introducing employers to even better technologies than current offerings and

testing out the viability of those technologies for running corporate applications.

**Keep employees happy . . . and productive.** At the end of the day, happy employees are productive employees. And if happiness for employees means using their own notebook computers to do work, an employer should seriously consider following this path.

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**SIX QUICK TIPS**

# Make Room

## Many Factors Are Involved When Planning Your Data Center Space

by Carmi Levy

• • •

**THE DAYS OF tossing equipment haphazardly into a temperature-controlled room and calling it a data center are over.** To achieve maximum efficiency, reduce downtime, and minimize operational costs, today's IT departments are focusing on a range of data center design best practices. It may take a bit more time and money to design a space that works, but the payoff can be significant. Consider the following tips as you lay out your next data center.

### Standardize Your Cabinets & Racks

Although IT typically owns the data center, the equipment inside often belongs to or is controlled by various business units. Heterogeneity drives up costs, as it forces IT to uniquely manage each solution that's brought in. Lack of standards compromises centralized management and impacts physical layout, which in turn leads to power, cooling, and floor space issues.

Jerry Allen, manager of Georgia State University's Technology Operations Center ([www.gsu.edu](http://www.gsu.edu)), says the data center can avoid compromise by imposing specific limits.

"When we're asked to host equipment, if it doesn't fit into our standard cabinet, then it probably won't go into the data center," he says. "It absolutely has to be rackable because we don't have shelves to put workstation-type servers in here. It's

been difficult to get across to people that this is the way things have to be. But we've gotten there."

If exceptions must be made, allocate at least one row for equipment that has unique space, power, or cooling needs. Avoid placing exceptional equipment in standardized rows or areas.

### Keep Similar Technologies Together

Partitioning specific technologies into their own areas makes it easier to move them out—and move new equipment in—when systems reach end of life.

"A two-section layout of consistent technologies recognizes that you don't install or remove all your equipment at exactly the same time," says Ron Service, director of management information services for COM DEV ([www.comdev.ca](http://www.comdev.ca)), a space hardware designer and manufacturer. "So when something new comes along, you can keep your unaffected equipment in place. This reduces labor, risk, and expense and maximizes uptime during any changeover period."

At the same time, Service advises managers to watch floor density. "Don't jam your data center to the point where you can't function," he says. "Getting new racks in and out as equipment expires should be easy in a well-laid-out room."

### Max Out Your Data Connections

It's easy to underestimate the number of data connections required for a given piece

of equipment. Georgia State University's Allen says basic servers typically require three connections: foreground, background, and management. The numbers grow from there. More complex devices such as host servers may require up to eight network connections and four fiber connections. After installing 25 boxes into a 42U cabinet, Allen says things can quickly get out of hand.

"You need to be able to handle the growth of cable management," he says. "Otherwise, you'll have an unimaginable mess in back of your cabinets, and you'll find it next to impossible to figure out which cable goes where."

To leave sufficient room for future growth, Allen advises using wider 30-inch cabinets. "At minimum, we'd be using 24-inch-wide units," he says. "The extra 6 inches of width in the 30-inch units lets us build cable management right into the rails. If you don't, everything hangs out the back, you can't close the doors, and you can't do the things you need to do."

Allen recommends against using patch panels. Instead, he uses switches to reduce the maximum length of any copper segment to 20 feet. Each switch manages up to three cabinets and is connected to a core router via fiber. The solution minimizes cable runs, improves airflow and cooling, and further eases cabinet access.

### Create A Separate Test & Staging Area

Set up an area to work with new or non-standard equipment before it goes into production, advises Allen, who recently did just that when some new SAN switches came in.

"We wanted to work with them before we felt ready to put them into production," he says. "We needed enough room for fiber and power, and we didn't want it mixed in with our production environment. But we still wanted it close enough for our people to conveniently work with."

A staging area supports change management processes and avoids last-minute scrambles for power, cooling, and space.

Remote capability minimizes the need for systems administrators and other staff to spend time in the data center itself. Data center employees can provision equipment in the test area and then make it available remotely when it's ready to be moved into production. Reduced physical traffic in the data center is always a plus, says Allen.

"The chance of an incident occurring is reduced by the number of hands in the cabinet or the number of times the door is opened," he says. "Reduce the need for physical presence, and you improve reliability and reduce risk." □

**Best Cost-Savings:**

### Use Temporary Power Sources

Every room has a finite power limit. Unfortunately, the constant flow of projects through an organization often forces data centers above that limit. Projects that require legacy systems to remain up and running during a transition period to new infrastructure place particular strain on the electrical grid.

Jerry Allen, manager of Georgia State University's Technology Operations Center ([www.gsu.edu](http://www.gsu.edu)), has been leasing flywheel-based UPSes to bridge the gap. He can meet higher-than-average power needs, avoid unnecessary capital investment, and continue to support constantly evolving projects. These units have been extremely well-received and remain in demand, says Allen.

An added green bonus: Flywheel-based solutions don't require batteries, which Allen says sits well with increasingly eco-conscious students.

"They're not tolerant about wasteful energy policies," says Allen. "We really thought about that before we brought these in. It may seem like a small difference, but little things add up when you're trying to green your data center and send the right message to your ultimate customers."

**Best ROI:**

### Build New, If Possible

Companies don't always have the luxury of creating a purpose-built facility when redesigning their data centers. But if they have the option, long-term operational improvements and cost savings often make it an easy decision.

"When you're able to pick your location, you can pick your neighbors and your infrastructure," says Anthony Bolner, senior vice president at Stream Realty Partners ([www.streamdatacenters.com](http://www.streamdatacenters.com)). "When you're able to utilize a purpose-built structure, you benefit from a site that has been specifically selected for data center use. This approach has major advantages over something that simply wasn't built with this purpose in mind."

Those benefits include column spacing optimized for standardized rack and cabinet layouts and latest-generation cabling and power support. Proximity away from rail lines, flight paths, major arteries, and flood plains reduces disaster risk.

## BONUS TIPS

**■ Simplify your incoming power.** Avoid energy-inefficient 110-volt, 20-amp equipment. Managing different voltages and amperages drives costs up. To avoid needless complexity, standardize on a 220-volt, 30-amp infrastructure to reduce energy costs and simplify maintenance. Also, ensure whatever you plug in is auto-negotiable.

**■ Watch your airflow.** Some devices run hotter than oth-

ers. Know how much power everything draws and how much heat it emits. Place your hottest pieces of equipment—typically blade servers or larger devices—near air handlers. Just make sure these higher-temperature devices don't affect air movement elsewhere within the data center. Invest in an environmental audit before finalizing your design to avoid hotspots, minimize energy usage, and maximize reliability.

**■ Boost your signage.** In a crisis situation, such as an emergency shutdown or fail-over, seconds count. Staff members may not have time to consult a manual for instructions. Make sure critical workflows for these situations are displayed prominently within the data center. Ron Service, director of management information services for COM DEV ([www.comdev.ca](http://www.comdev.ca)), says something as simple as this can be a lifesaver when chaos hits.

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## WHAT'S HAPPENING

# Is Your Network In The Eye Of The Storm?

## Entuity Brings Network Management To SMEs

by Drew Robb

• • •

TRYING TO STAY on top of the network in this day and age is no easy task. While Ethernet networks are pretty mature, you now have to factor in VoIP, wireless, SaaS, and the growing presence of storage networking in SMEs.

For those who still have relatively small networks with minimal interdependency between devices and end-user services, it may still be possible for operations personnel to manage the infrastructure with low-cost "red light/green light" tools, scripts, and a series of freeware utilities. But many networks have far outgrown that stage for a variety of reasons: perhaps more capacity is needed, a new device is added, and another subnet is provisioned to open a remote sales office. Alternatively, the reason might be the addition of an application server or having to accommodate yet more office employees to cope with rapid expansion. In short, few SMEs can claim their networks are simple and easy to manage.

"Without visibility to capacity, utilization, operation thresholds, and historic trends, SMEs quickly outgrow reactive network tools," says Kenneth Klapproth, vice president of marketing at Entuity (800/926-5889; [www.entuity.com](http://www.entuity.com)). "Enterprise-class network management solutions automatically gather infrastructure data that can help SMEs with broader operational issues, such as reducing hardware maintenance costs, identifying spare capacity in already provisioned

devices, isolating transient conditions that are impossible to identify with diagnostic tools alone, and automating management processes that ensure maximum availability."

Entuity was founded more than a decade ago to address such challenges so that users could maximize the operation and efficiency of their networks. Two network operations engineers from the financial services industry realized there was no practical commercially available solution for access layer switched LAN management. That led to the first version of Entuity's product Eye Of The Storm (aka EYE), which shipped in 1999.

Headquartered in London, with a U.S. headquarters in Marlborough, Mass., Entuity has since grown into a major provider of management solutions that deliver network insight, control, and predictability. As well as countless SMEs, customers include the likes of ABB, Amtrak, BMC Software, Deutsche Bank, IBM Global Services, The Royal Bank of Scotland, Sony, Visteon, and the Williams Companies.

Despite its expansion, Entuity remains a privately held company with solid backing on the venture-funding front. LMS Capital is Entuity's majority shareholder. Other financial backers include Saffron Hill, Amadeus Capital Partners, Gartmore Group, and Spectrum Equity Investors.

### Product Range

EYE has changed markedly since its early beginnings. To make it attractive to SMEs, it has been made easier to deploy with a short learning curve. Ease of use and ease of maintenance are also stressed by Klapproth.

"EYE is particularly suited to SMEs where IT operations staff are expected to do more

with less, yet still implement new disruptive technologies like VoIP, SaaS, SAN, or virtualization," says Klapproth. "It's up and running within minutes and combines the most critical functionality for network management in an integrated, easy-to-use solution."

As the demands of networks are constantly changing, EYE has gone through major changes over the years. This has affected the orientation of the tool.



Whereas in the past, networking personnel were most interested in device configuration, today they are more focused on delivering applications and services. "The network is still foundational, but the visibility required is different," says Klapproth.

Thus the current version of EYE provides more in the way of graphical dashboards, reports, and graphs in order to simplify complex infrastructure interdependencies. What this adds up to is a tool that provides automated, continual discovery of network infrastructure inventory and connectivity to maintain an up-to-date knowledge base of the network from the core to the edge. In addition, it has integrated fault and performance management capabilities and real-time notifications to physical network changes.

"EYE network management helps businesses realize the maximum benefit of today's distributed applications, virtualized environments, network-based services, and contemporary data sharing strategies by ensuring the network is economically

deployed and optimally performing," says Klapproth. "It automatically captures network data and provides integrated fault and performance management capabilities that help SMEs reduce network downtime."

Real-time and historical critical network management data is captured in the EYE CMDB (Configuration Management Database). This provides a verified source of network asset information for service delivery and assurance.

Further, there are several optional EYE modules available that may be applicable to the needs of SMEs. The EYE QoS Module automatically discovers a detailed inventory of QoS configurations and monitors each interface's performance in real time. The EYE Cisco IOS IP SLA Module improves visualization and alerting of predictable network traffic to improve IP service levels. These modules present their information alongside EYE's traditional network diagnostic and forensic information for a unified view of overall network performance.

"If SMEs work smarter, not harder, they can eliminate network problems before end-user impact," says Klapproth. "A predictable enterprise-strength network management solution can proactively prevent service interruptions to improve business profitability while eliminating the unnecessary busy work of diagnosing and troubleshooting problems after they occur."

### New Version Coming

Entuity is currently working on the next version of EYE. Due out in the final quarter of this year, it includes improvements that are designed to reduce the cost of managing distributed environments, Web-based user interfaces, and simplified integration of management data with broader business reporting.

"Users are challenged to optimally deliver the IT services required by their companies," says Klapproth. "The coming releases of Eye Of The Storm will directly address these needs with Web UIs and reporting functionality to provide automated, actionable network management intelligence." P

## THREE QUESTIONS

# Checking On Security, Compliance & Performance

## AirDefense Monitors 802.11 WLANs For Rogue APs, Intruders & More

by Daniel P. Dern

AS THE ONGOING DEVELOPMENTS in the TJX data breaches and other events show, failing to secure an organization's 802.11 wireless environment is no longer acceptable. And while encryption, authentication and access control, and endpoint security are all important parts of securing your network, they're not sufficient. "Monitoring your airspace is sometimes the only way to ensure compliance," says Amit Sinha, chief tech-

nology officer at AirDefense ([www.airdefense.net](http://www.airdefense.net)). "You almost never trust infrastructure to monitor itself."

Founded in 2001, Alpharetta, Ga.-based AirDefense sells monitoring and wireless intrusion prevention systems and software applications that help organizations secure 802.11 networks against wireless security threats. Its products also provide automated wireless protection, policy

monitoring, and compliance enforcement both inside and outside an organization's physical locations and wired networks and can do remote RF (radio frequency) performance troubleshooting and forensic and incident analysis.

### ■ What are the biggest IT-related issues facing today's small to midsized enterprise?

"Information security—the need to be secure and to prove your company is secure—has also become a top concern for most businesses," says Sinha. "The cost of data breaches and the fact that organized crime is after financially lucrative data, as demonstrated in recent indictments and retail breaches, has increased concern over IT security. And being able to guarantee customer privacy, protect trade secrets and business brand, and operate in compliance with government and industry regulations remains a huge challenge."

### ■ What should Processor readers know about your company's products?

The company's flagship AirDefense Enterprise and related mobile/personal and network planning products are in use in more than 800 Fortune 500

companies; healthcare organizations; high-security government agencies; retail, transportation, and logistics organizations; and other enterprises.

"Our sensors scan all channels in the 802.11 wireless bands in real time, collecting information and statistics on the devices they see, and report to our hardened purpose-built central server appliance," says Sinha.

"We also offer AirDefense Mobile, for use on laptops, to get a quick snapshot of local activity and to find rogue devices with 'Geiger counter'-type locating," says Sinha. "We offer two planning tools, AirDefense Architect, which can import AutoCAD drawings and perform sophisticated 3D RF coverage simulations, and AirDefense Survey. And for notebook users who may not always be in the monitoring range of our sensors, we have AirDefense Personal, a small agent program that enforces policies, provides wireless endpoint protection, and sends events and alarms back to the central server."

Security isn't the only reason to use AirDefense, Sinha notes. "IT uses AirDefense a lot for remote wireless troubleshooting. About 60 to 70% of

typical wireless-related trouble tickets can be resolved remotely with AirDefense, avoiding the need to send a tech onsite with a wireless analyzer," he says. "You can do remote packet captures, connection troubleshooting, spectrum analysis, and performance analysis by having dedicated wireless sniffers connected to a central server."

In July, AirDefense announced it had signed an agreement to be acquired by Motorola. "We've been working with Motorola for almost three years and have a number of road map items," says Sinha. "You will see some deeper integration as a result of the acquisition, and we are enhancing our monitoring and security alarms and our performance troubleshooting tools to let customers better manage and troubleshoot their wireless networks."

### ■ What makes your company unique?

AirDefense holds the earliest, broadest, and most fundamental patents in the area of wireless intrusion prevention, monitoring, and troubleshooting, notes Sinha. "We own all the dominant patents in this space, including in Wireless Intrusion Prevention, for 'AirTermination,' and for using sensors for performance troubleshooting."

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